Maryland
STATE MEDICAL JOURNAL

Medical and Chirurgical Faculty of the State of Maryland

VOLUME 6 *January, 1957* NUMBER 1

PRESIDENTIAL EDITORIAL

C. REID EDWARDS, M.D.*

Several months ago a questionnaire was sent out, by The Planning Committee, to all members of The Medical and Chirurgical Faculty. The Council realized that, if possible and acceptable to the membership, some changes should be made in the manner of con-

C. Reid Edwards, M.D.

ducting the "business" of The Faculty. The Council appointed The Planning Committee and instructed it to form and forward the questionnaire. This was done and probably a better than average response was obtained.

*President, Medical and Chirurgical Faculty, 1957.

An analysis of these replies leaves some facets of the overall organization and procedures in doubt. But, one fact stands out and that is, that the physicians of the state desire above all else, to run their own show. This is as it should be. The practice of Medicine, with all that it involves, is one of the biggest businesses in the nation, and certainly those who carry the burden should be subservient to none.

Progress, in the past, has been initiated from within. It is a real comfort to know that, but it will remain so, only if we keep it so. To enjoy freedom of thought and action is fundamental to our way of life. Encroachment upon these freedoms runs counter to our principles.

Let us not, in acquiescence, witness the defeat of our "privileges and opportunities" because of interference through supervision from without.

We have witnessed the tremendous and rapid growth of various insurance plans, to help take the financial burden off of the patient who in many instances sorely needs help. None of these plans have been entirely satisfactory. Too often they have been too limited. A plan, to be good, must apply to all patients who need treatment and must be made to cover home and office, as well as hospital treatment. This would help re-institute and continue the proper doctor-patient relationship. Fortunately, our profession is represented on The Blue Shield Plan and Medical Care Program. Both of these plans have proved their value. Both were initiated by our Faculty. To these is now added the plan for the care of government dependents. It probably will not involve a large percentage of our profession, but it may prove an entering wedge for extended government participation in the practice of Medicine in our state. It is incumbent, therefore, on The Medical and Chirurgical Faculty to study this plan very carefully and exercise a guiding influence on its application. It does not matter that only a small percentage of the practitioners of the state will be involved; the main problem will be to justly administer it and thereby prevent it from being corrupted, as has The Veterans' Care Program. Justice dictates that veterans are entitled to medical care for service connected disabilities, but there it should stop. The extension of the medical care to non-service connected disabilities is wherein the corruption lies. A review of The Veteran Bureau of Statistics discloses this beyond any shadow of a doubt.

The Medical and Chirurgical Faculty is well on its way in the final quarter of its first two-hundred years. Its progress and service to the state and to the nation was properly recognized at its sesquicentennial. The years since the beginning of this century have recorded so many advances that one wonders if the pace can be maintained. Yet, every year brings new discoveries, new methods, and better results. In reviewing our past records, we can recall countless committees and groups or sections, for the study of many diseases or health conditions, whose responsibility it was to initiate and spread methods to eradicate, control, and treat these various maladies as they were encountered. The eradication of so many of the communicable diseases; the control of water supply and sewage disposal; the control and prevention of tuberculosis; the immunization of children at an early age; the study of foetal and maternal mortality; the early detection and adequate treatment of crippled children; the educational program concerning cancer and the establishment of detection centers; these and many other activities serve to demonstrate the responsibilities of the profession to the citizens of the State of Maryland.

The application of improvements of new methods and of new discoveries has always had social implications. But progress has always been generated from within. Let us never put the cart before the horse. A stronger, better functioning Medical and Chirurgical Faculty is the best guarantee against pressure from without, which covets control.

PRESIDENTIAL APPOINTMENTS

Dr. C. Reid Edwards, the President, has appointed the following Continuing Committees of the Medical and Chirurgical Faculty for 1957:

COMMITTEE TO COOPERATE WITH AMERICAN MEDICAL EDUCATION FOUNDATION

William S. Stone, *Chairman*, Baltimore; John T. B. Ambler, Easton; Osborne D. Christensen, Salisbury; Wylie M. Faw, Jr., Cumberland; William B. Hagan, Mt. Rainier; John H. Hornbaker, Hagerstown; James R. Martin, Annapolis; A. Austin Pearre, Frederick; Charles H. Williams, Pikesville; Arthur Woodward, Rockville.

BLOOD BANK ADVISORY COMMITTEE

Milton S. Sacks, *Chairman*, Baltimore; C. Lockard Conley, Baltimore; Julius R. Krevans, Baltimore; Kendrick McCullough, Salisbury; Walter C. Merkel, Baltimore; Vernon H. Norwood, Baltimore; H. Raymond Peters, Baltimore; Isadore A. Siegel, Baltimore; Benedict Skitarelic, Cumberland; Carroll L. Spurling, Baltimore; John Whitridge, Jr., Baltimore.

CONSTITUTION AND BY-LAWS

W. Houston Toulson, *Chairman*, Baltimore; E. Cowles Andrus, Baltimore; Thurston Harrison, Easton; Donald Hooker, Baltimore.

COMMITTEE ON DIABETES

Lester A. Wall, Jr., *Chairman*, Baltimore; Edmund G. Beacham, Baltimore; Charles J. Blazek, Baltimore; Ernest C. Brown, Jr., Baltimore; Caroline H. Callison, Centreville; Charles R. Campbell, Baltimore; Henry V. Chase, Frederick; J. Wilfrid Davis, Baltimore; J. Sheldon Eastland, Baltimore; Edward J. Edelen, LaPlata; Robert W. Farr, Chestertown; Sylvan Goldberg, Baltimore; J. Roy Guyther, Mechanicsville; W. Grafton Hersperger, Baltimore; Philip W. Heuman, Bel Air; Seth H. Hurdle, Salisbury; Samuel M. Jacobson, Cumberland; Page C. Jett, Prince Frederick; E. Paul Knotts, Denton; George Allen Moulton, Jr., Westminster; Charles F. O'Donnell, Towson; Margaret V. Palmer, Easton; John W. Parsons, Baltimore; Sarah M. Peyton, Crisfield; J. Emmett Queen, Baltimore; George Sharpe, Kensington; Frank M. Shipley, Annapolis; Theodore R. Shrop, Ellicott City; Abraham A. Silver, Baltimore; Samuel J. N. Sugar, Mt. Rainier; J. Frank Supplee, III, Baltimore; Nathaniel R. Thomas, Ocean City; James U. Thompson, Cambridge; W. Alfred VanOrmer, Cumberland; George J. Weems, Huntington.

GERIATRICS COMMITTEE

Herman Seidel, *Chairman*, Baltimore; Louis Z. Dalmau, Pikesville; V. L. Ellicott, Towson; W. Grafton Hersperger, Baltimore; Benjamin Kader, Baltimore; George J. Kries, Jr., Elkton; Thomas F. Lusby, Oakland; George S. Mirick, Baltimore; Merritt Robertson, New Windsor; Norman E. Sartorius, Sr., Pocomoke City.

COMMITTEE ON INDUSTRIAL HEALTH

Nathan B. Herman, *Chairman*, Baltimore; Thurston R. Adams, Baltimore; John W. Ashworth, Baltimore; Lester T. Chance, Baltimore; Ferdinand E. Chatard, IV, Baltimore; William H. Fisher, Jr., Salisbury; Hugh C. F. Gill, Sparrows Point; Donald B. Grove, Cumberland; F. Ford Loker, Baltimore; William A. Pillsbury, Jr., Timonium; Perry F. Prather, Baltimore; Charles A. Reifschneider, Baltimore; Conrad L. Richter, Baltimore; Augustine VonSchulz, Baltimore; Huntington Williams, Baltimore.

LEGISLATIVE COMMITTEE

Karl F. Mech., *Chairman*, Baltimore; Frederic V. Beitler, Baltimore; Henry A. Briele, Salisbury; Melvin B. Davis, Dundalk; George O. Eaton, Baltimore; William L. Garlick, Baltimore; Raymond F. Helfrich, Baltimore; William T. Layman, Hagerstown; John Mace, Jr., Cambridge; S. Edwin Muller, Baltimore; Samuel J. N. Sugar, Mt. Rainier; Francis J. Townsend, Jr., Ocean City.

Each Component Society is represented by the incumbent President, Secretary and Treasurer, and also the Chairman of the Legislative Committee of the Baltimore City Medical Society.

MATERNAL AND CHILD WELFARE COMMITTEE

J. Morris Reese, *Chairman*, Baltimore; J. Edmund Bradley, *Vice-Chairman*, Baltimore; George W. Anderson, Baltimore; John A. Askin, Baltimore; J. Tyler Baker, Easton; Harry D. Bowman, Hagerstown; Stuart Christhilf, Jr., Annapolis; Raymond L. Clemmens, Baltimore; Irvin M. Cushner, Baltimore; D. McClelland Dixon, Baltimore; Nicholson J. Eastman, Baltimore; H. W. Eliason, Cumberland; Abraham H. Finkelstein, Baltimore; Janet B. Hardy, Glenarm; Paul Harper, Baltimore; Arthur L. Haskins, Baltimore; John S. Haught, Mt. Rainier; W. Royce Hodges, Jr., Cumberland; D. Frank Kaltreider, Baltimore; W. Kenneth Mansfield, Baltimore; Hugh B. McNally, Baltimore; William C. Morgan, Salisbury; Richard B. Norment, III, Havre de Grace; Albert M. Powell, Jr., Frederick; John E. Savage, Baltimore; Stedman W. Smith, Salisbury; Jean Rose Stifler, Baltimore; Gibson J. Wells, Baltimore; Byron D. White, Frederick; John Whitridge, Jr., Baltimore.

JOINT COMMITTEE WITH THE BAR ASSOCIATIONS ON MEDICOLEGAL PROBLEMS

Russell S. Fisher, *Chairman*, Baltimore; Conrad Acton, Baltimore; Melvin B. Davis, Dundalk; John M. Dennis, Baltimore; Manfred S. Guttmacher, Baltimore; Howard F. Kinnamon, Easton; John E. Miller, Baltimore; Richard T.

Shackelford, Baltimore; Henry F. Ullrich, Baltimore; W. Kennedy Waller, Baltimore; Samuel R. Wells, Hagerstown.

MEMOIR COMMITTEE

A. S. Chalfant, *Chairman*, Baltimore; John F. Hogan, Sr., Baltimore; Robert H. Riley, Catonsville

MENTAL HYGIENE COMMITTEE

Jacob Ellis Finesinger, *Chairman*, Baltimore (1957); Jerome D. Frank, Baltimore (1957); Manfred S. Guttmacher, Baltimore (1957–1958); Kenneth B. Jones, Church Creek (1957–1958); William W. Magruder, Baltimore (1957–1958); Clifton T. Perkins, Towson (1957–1959); Kent E. Robinson, Baltimore (1957–1959); Irving J. Taylor, Ellicott City (1957–1959); Sarah S. Tower, Baltimore (1957–1960); Isadore Tuerk, Catonsville (1957–1960); James S. Whedbee, Jr., Baltimore (1957–1960).

COMMITTEE ON NATIONAL EMERGENCY MEDICAL SERVICE

I. Ridgeway Trimble, *Chairman*, Baltimore; Perry F. Prather, *Co-Chairman*, Baltimore; John G. Ball, Bethesda; David J. Gilmore, Salisbury; Richard V. Hauver, Hagerstown; Robert C. Kimberly, Baltimore; Daniel J. Pessagno, Baltimore; Huntington Williams, Baltimore; Frank D. Worthington, Frederick.

NEW BUILDING COMMITTEE

Albert E. Goldstein, *Chairman*, Baltimore.

Subcommittee on Building Plans: R. Walter Graham, Jr., *Chairman*, Baltimore.

Subcommittee on Finance: Charles F. O'Donnell, *Chairman*, Towson; John W. Parsons, *Treasurer*, Baltimore; James G. Arnold, Jr., Baltimore; William L. Garlick, Baltimore; Harry C. Hull, Baltimore; Marius P. Johnson, Baltimore; Richard W. TeLinde, Baltimore.

COMMITTEE FOR THE STUDY OF PELVIC CANCER

Richard W. TeLinde, *Chairman*, Baltimore; Frank K. Morris, *Vice-Chairman*, Baltimore; Beverley C. Compton, *Secretary*, Baltimore; Fernando G. Bloedorn, Baltimore; Thomas S. Bowyer, Baltimore; C. Bernard Brack, Baltimore; Obsorne D. Christensen, Salisbury; Robert J. Dickson, Baltimore; William K. Diehl, Baltimore; V. L. Ellicott, Baltimore; Gerald A. Galvin, Baltimore; Arthur L. Haskins, Baltimore; William Royce Hodges, Jr., Cumberland; Howard W. Jones, Jr., Baltimore; Theodore Kardash, Baltimore; Joseph C. Sheehan, Annapolis; A. Adler Sondheimer, Baltimore.

COMMITTEE TO STUDY PROBLEMS OF MUTUAL INTEREST TO THE MEDICAL AND CHIRURGICAL FACULTY AND THE MARYLAND PHARMACEUTICAL ASSOCIATION

Appointed in 1955, as authorized by Council April 1955 at the request of the Professional Relations Committee of the Maryland Pharmaceutical Association.

Edward F. Cotter, *Chairman*, Baltimore; Martin L. Singewald, Baltimore; James R. Karns, Baltimore.

ADVISORY COMMITTEE TO THE STATE ACCIDENT FUND

Raymond E. Lenhard, *Chairman*, Baltimore; James G. Arnold, Baltimore; John W. Ashworth, Baltimore; George O. Eaton, Baltimore; Donald B. Grove, Cumberland; H. Alvan Jones, Baltimore; James R. Karns, Baltimore; Howard M. Kern, Baltimore; John O. Robben, Silver Spring; S. Jack Sugar, Hyattsville; Charles C. Zimmerman, Cumberland.

COMMITTEE TO CONSULT WITH THE STATE DEPARTMENT OF HEALTH

The Committee to consist of the President, the President-elect, two past Presidents, the Secretary and four general practitioners, appointed by the President, of which one represents the Maryland Academy of General Practice.

Bender B. Kneisley, *Chairman*, Hagerstown (President, 1954); William H. F. Warthen, Towson (President, 1956); Charles Reid Edwards, Baltimore (President, 1957); President-elect (Not elected until May 1957); Everett S. Diggs, Secretary, Baltimore; Four General Practitioners: David H. Andrew, Dundalk; Archie R. Cohen, Hagerstown; Merrill M. Cross, Silver Spring; Harold B. Plummer, Preston (Maryland Academy of General Practice).

TUBERCULOSIS COMMITTEE

Edmund G. Beacham, *Chairman*, Baltimore; Otto C. Brantigan, *Vice-Chairman*, Baltimore; R. Adams Cowley, Baltimore; Leon H. Hetherington, Ruxton; Milton B. Kress, Baltimore; John E. Miller, Baltimore; Lawrence M. Serra, Baltimore; Charlotte Silverman, Baltimore; Hugh G. Whitehead, Jr., Baltimore; Samuel Wolman, Baltimore.

COMMITTEE ON VETERANS' MEDICAL CARE

Amos R. Koontz, *Chairman*, Baltimore; Ernest I. Cornbrooks, Jr., Baltimore; Francis G. Dickey, Baltimore; Arthur Karfgin, Baltimore; William D. Lynn, Baltimore; S. Edwin Muller, Baltimore; Harry P. Porter, Baltimore; Raymond C. V. Robinson, Baltimore.

As a result of the recommendations of the Committee to Survey Committees, the House of Delegates has authorized the designation of Faculty Committees as follows: CONSTITUTIONAL COMMITTEES are those elected by the House of Delegates, or selected, as directed in the Constitution and By-Laws; CONTINUING COMMITTEES which are appointed by the President; and SPECIAL COMMITTEES as appointed by the House of Delegates, the Council, the Executive Committee, or the current President. The duties of some of the SPECIAL COMMITTEES are completed in a few months, and others require several years, but the personnel remains the same and alteration would be made only at the request of the committee.

Scientific Papers

GASTRIC CARCINOMA[1,2]

GEORGE H. YEAGER, M.D.

Statistically speaking and exclusive of carcinoma of the skin, carcinoma of the stomach is the second most frequent site for its occurrence in the male; whereas in the female, it ranks as the fourth most frequent site, being equal in frequency to carcinoma of the rectum.

The onset of cancer of the stomach is insidious, and the early symptoms are usually easily ameliorated. As with cancer elsewhere, the most important question is—how can more cures be obtained? Prompt diagnosis and prompt surgical intervention are essential if this is to be accomplished. Despite extensive and continuing educational campaigns of public instruction about cancer, a review of various series of carcinoma of the stomach reveals that the duration of symptoms before medical consultation was somewhat longer, in recent reported series when compared to similar series studied a decade previously.

In addition to patient delay, all too frequently there is physician delay, as well as diagnostic and therapeutic error. Not infrequently carcinoma of the stomach is mistaken for gastric ulcer and treated accordingly.

Walters and Berkson in 1952, reported a 180 per cent improvement in the outlook for patients receiving a diagnosis of cancer of the stomach at the Mayo Clinic. That Clinic's survival rate was 5 per cent in the years from 1907 to 1916, and it was estimated as 14 per cent for the period from 1940 to 1949.

A casual attitude toward known precursors of cancer of the stomach must be decried. Adenomatous gastric polyps seem unquestionably a precursor of gastric cancer, and their removal is required. Regardless of opinion about the change of a benign ulcer to a malignant one, it is clearly established that about 10 per cent of gastric ulcers, surgically and non-surgically treated, are malignant. Meissner, of Shields Warren's Laboratory makes the statement that many gastric carcinomas are superficial, particularly in their early stages, and may undergo central peptic ulceration, thus giving a pathologic picture of both ulcer and cancer. It has been stated that a diagnosis of carcinoma arising from benign chronic peptic ulcer must be made with extreme caution pathologically, and only when clinical and radiologic impressions are consistent with the pathologic changes.

Bockus is of the opinion that carcinoma of the stomach and peptic ulcer are distinct diseases, and that malignant degeneration does not occur in a gastric ulcer as often as had been anticipated.

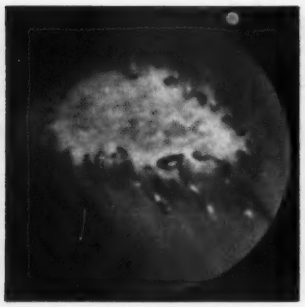
No completely reliable clinical data are available to distinguish all cases of benign ulcer from malignant gastric ulcer. Such differentiation must be made by pathologic examination after removal of the tissue.

Eusterman has emphasized that small ulcerating carcinomas or carcinomatous ulcers may present symptoms indistinguishable from benign ulcer, and this is the practical aspect from the standpoint of treatment of the problem of gastric ulcer rather than whether a benign ulcer becomes cancerous or not. He also has suggested that the recent onset of an ulcer, the large size of the lesion, the location (greater curvature or prepyloric area), progressive clinical

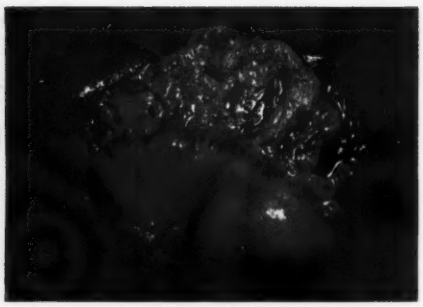
[1] From the Department of Surgery, University Hospital, Baltimore, Maryland.

[2] One of a series of papers from the Maryland Division of the American Cancer Society that will appear from time to time.

1



2



3

FIG. 1. Type I, carcinoma at anterior terminus of the angulus. Diagnosed by gastroscopy. (Plate 35—Stomach Disease as Diagnosed by Gastroscopy by Eddy D. Palmer, A.B., M.S., M.D. Permission to reproduce Plate 35 granted through the kindness of Lea and Febiger, Publishers.)

FIG. 2. Type II, carcinoma of the lesser curvature of the distal pars media. (Plate 36—Stomach Disease as Diagnosed by Gastroscopy by Eddy D. Palmer, A.B., M.S., M.D. Permission to reproduce Plate 36 granted through the kindness of Lea and Febiger, Publishers.)

FIG. 3. Carcinoma of the stomach.

course, histamine-fast achlorhydria, prepyloric obstruction, and persistent occult blood in the stool with increase in the size of the lesion while under treatment are strong evidences of the possibility of malignant degeneration or the presence of an ulcero-cancer. Such clinical findings would certainly warrant early operation in many patients.

The only safe course to follow in medical treatment of a gastric ulcer is to insist upon complete healing of an ulcer at the completion of an adequate period of controlled medical therapy. Patients with malignant gastric ulcers under medical therapy not only improve symptomatically, but often may become symptom free. A malignant ulcer may decrease in size but will not completely disappear. All patients with ulcers that fail to heal under good medical management should be operated upon early.

Sanders et al. state that "the physical examination of a patient with gastric cancer will reveal little of significance unless the disease has progressed to a stage of tumor formation and a mass is elicited on palpation. If located in the pyloric antrum or mid-portion of the stomach, the mass may be easily detected; if near the cardia, it may be impalpable even though well developed.

"In view of the prevalence of anemia in association with gastric cancer, studies of the blood are an essential part of the examination. When anemia is found in combination with symptoms referable to the gastrointestinal tract, an exhaustive study is indicated. This fact should be universally recognized, yet we still see many patients with a gastrointestinal cancer who have been treated for anemia over a prolonged period, the disease meanwhile attaining incurable proportions.

"Roentgen examination will demonstrate the malignancy in 90 to 95 per cent of patients. Retention is significant, especially in the early stage of the disease. Fungating tumors are clearly visible in the film, while infiltrative growths produce a thickening of the adjacent stomach wall and prevent its expansion. Unfortunately, when a filling defect can be demonstrated, the disease is already so far advanced as to damage seriously the mucosa and muscular wall, if it has not metastasized to remote regions.

"Gastroscopy is of diagnostic value in early or doubtful cases. LaDue and co-workers found that the diagnostic accuracy was increased by 9.5 per cent by the use of this method. It is especially valuable for distinguishing between cancer of the cardioesophageal junction and cardiospasm.

"Gastric analysis may be made to determine the presence of achlorhydria when the roentgenogram fails to reveal a lesion. This procedure is confirmatory but not diagnostic; approximately one half of these patients have free hydrochloric acid in the stomach. Thus, the discovery of acids should be ignored when there is a cancer history and other evidence of the disease. Moreover, since the majority of elderly patients normally have low gastric acids, in this group anacidity is not necessarily significant of cancer.

"If facilities permit, any question of the differential diagnosis may be settled by cytologic studies. These studies, however, require special technics and therefore are not generally available."

Surgical treatment of carcinoma of the stomach has advanced considerably since the first successful partial gastrectomy performed for this disease in 1881 by Billroth, and the first successful total gastrectomy performed in 1897 by Schlatter.

Many and varied approaches have been employed in an effort to improve the prognosis of patients who have carcinoma of the stomach. There are certain objectives of great importance if efforts to improve the outlook of patients are to succeed. These are (1) early diagnosis in a larger proportion of cases and accurate differential diagnosis; (2) an increased operability rate; (3) an increased resectability rate; (4) more accurate surgical evaluation followed uniformly by properly executed surgical removal of the lesion and adjacent tissues; and (5) decrease in surgical mortality.

Details of the operation which is employed in the removal of a gastric carcinoma are of great importance in determining the prognosis after operation. Currently, opinions differ regarding what constitutes a proper operation for this lesion. It appears impossible at this time for anyone to state with certainty whether total gastrectomy should be performed in all cases of gastric carcinoma. Within reason, all possible avenues of spread or extension should be removed. This does not necessarily imply, however, resection of uninvolved contiguous tissues. It has been the experience of many surgeons that in most cases, removal of areas of lymphatic drainage may be carried out just as extensively if the stomach is subtotally resected as if it is totally resected.

The surgical methods utilized today in the treatment of gastric malignancy consist of three basic types: (a) distal subtotal gastrectomy; (b) proximal subtotal gastrectomy; and (c) total gastrectomy.

Basically, as wide a resection as possible should be done. The resection should extend as low as possible on the duodenum and at least 5 cm. above or proximal to the final proved extension of the lesion. All the attached gastrohepatic and gastrocolic omentum containing the perigastric lymph nodes should be removed, and the latter should be dissected from the colon.

Medical Arts Building
Baltimore 1, Maryland

BIBLIOGRAPHY

1. Allen, A. W.: Cancer of the Stomach. (Editorial) Surg., Gynec. & Obst., **92:** 757, June 1951.
2. Black, M. M., Opler, S. R. and Speer, F. D.: Microscopic Structure of Gastric Carcinomas and Their Regional Lymph Nodes in Relation to Survival. Surg., Gynec. & Obst., **98:** 725, June 1954.
3. Boyce, F. F.: Certain Preventable Errors in the Diagnosis and Management of Carcinoma of the Stomach and the Lung. Ann. Surg., **137:** 864, June 1953.
4. Eusterman, G. B.: Newer Phases of Gastroduodenal Ulcer. (Julius Friedenwald Memorial Address) Gastroenterol., **8:** 575, 1947.
5. Hunt, C. J.: Modern Trends in the Surgical Management of Malignant Lesions of the Stomach and Colon. Illinois Med. J., **103:** #1, January 1953.
6. Hoerr, S. O.: A Surgeon's Classification of Carcinoma of the Stomach; Preliminary Report. Surg., Gynec. & Obst., **99:** 281, September 1954.
7. Idem: Cancer of the Stomach. Cleveland Cl. Quarterly, **21:** 205, October 1954.
8. Kirschner, P. A. and Garlock, J. H.: An Appraisal of Surgical Treatment of Gastric Malignancy. Ann. Surg., **138:** 1, July 1953.
9. LaDue, J. S., Murison, P. J., McNeer, G. and Pack, G. T.: Symptomatology and Diagnosis of Gastric Cancer. Arch. Surg., **60:** 305, February 1950.
10. Marshall, S. F.: The Relation of Gastric Ulcer to Carcinoma of the Stomach. Ann. Surg., **137:** 891, June 1953.

11. RAVDIN, I. S. AND HORN, R. C., JR.: Gastric Ulcer and Gastric Cancer. Ann. Surg., **137:** 904, June 1953.
12. REMINE, W. H., DOCKERTY, M. B. AND PRIESTLEY, J. T.: Some Factors Which Influence Prognosis in Surgical Treatment of Gastric Carcinoma. Ann. Surg., **138:** 311, September 1953.
13. SANDERS, R. L. AND MCBURNEY, R. P.: Primary Carcinoma of the Stomach. Amer. Surgeon, **20:** 952, September 1954.
14. WALTERS, W. AND BERKSON, J.: An Improvement of 180 Per Cent in the Five-Year Survival Rate of Patients with Carcinoma of the Stomach. Ann. Surg., **137:** 884, June 1953.
15. ZINNINGER, M. M.: Extension of Gastric Cancer in the Intramural Lymphatics and Its Relation to Gastrectomy. Amer. Surgeon, **20:** 920, September 1954.
16. PALMER, E. D.: Stomach Disease as Diagnosed by Gastroscopy. Lea & Febiger, Philadelphia, 1949.

WHAT EVERY DOCTOR SHOULD KNOW ABOUT HYPNOSIS[1]

JACOB H. CONN, M.D.[2]

Franz Anton Mesmer (1734–1815) was a learned man who had been a student of music, theology, philosophy, physics, mathematics and jurisprudence, before he entered the Medical School of the University of Vienna. He was graduated with honors in 1766 at the age of 32, and to prove that he was as practical as he was learned, Mesmer married a wealthy widow, ten years older than himself, tried to be a good father to her 20-yr. old son, and settled down to a dull, married life. It was the era of theorists and system makers. The best scientific work was done in chemistry and physics by Cavendish, Priestly, Lavoisier, Galvani and Volta.

Mesmer was a tall, impressive, ponderous fellow, a slow thinker, who, when he once got hold of an idea, would not let it go. His teachers, Girard Van Swieten, and de Haen were Dutchmen, and students of the great Hermann Boerhaave. They had been invited by Maria Theresa, Queen of Austria, to organize a clinic on the famous Leyden model. Mesmer's graduation thesis—(1766)—De Planetarium Influxa, was not taken too seriously. It described the influence of the planets on the human body, and included a mixture of the new physics of Benjamin Franklin and the metaphysics of Paracelsus (1493–1541). A contemporary of Vesalius, Paracelsus was a contentious rebel, who had denied the superiority of Galen and Avicenna, and like Paré, taught that "in wounds, nature is the real physician." He also stated that from the stars, and other bodies, especially magnets, emanated a "fluidum" which influenced the human body. Mesmer "borrowed" this idea, as well as the concepts of Richard Meade on the influence of the moon and sun from De Imperio Solis ac Lunae in Corpora Humana—(1704), and ingeniously combined it with three other traditional healing components.

From time immemorial soothsayers, Persian magi and Indian yogi had produced self-induced trances by staring at precious stones and other shiny objects. The earliest medical records contain accounts of the miraculous cures by the Gods, who gave advice in a dream or healed while the patient was asleep in the temples dedicated to them. Incubation or temple sleep was common practice in Egypt and Greece.

The curative effect of the laying on of hands already was known in biblical times, and was practiced in the temples of Isis and Epidauros. The Romans called the index finger, Medicus and the Greek, Heracles, patron of the health giving springs, was known as Dactylus. In the

[1] Presented to the General Practice Section of the Baltimore City Medical Society on Thursday, January 20, 1955.

[2] Assistant Professor of Psychiatry, The Johns Hopkins University Medical School; Advisory Editor, Journal of Clinical and Experimental Hypnosis.

middle ages, Kings and Emperors healed by laying on the hands (The Royal Touch) until William III (1689–1702) discouraged it by saying, "May God give you better health and more common sense!"

Mesmer unwittingly brought together the healing touch, the beneficial effects of the temple sleep and the induced trance state, and had combined them into a new healing art in terms of the current, scientific magnetic theories of the time.

Therapeutic suggestion under a variety of names has been known from the beginning of recorded history. The cave dwellers drew pictures on their walls demonstrating how magic, religion and medicine were one and the same in these earliest times. Primitive medicine had used suggestive therapeutics to evolve effective cures for spirit intrusion, soul loss, object intrusion, and the violation of taboo.

Mesmer lived in an age in which witches were still being burned. (The last "witch" was burned in 1782). Witches and wizards had been as real to the doctors of the 15th and 16th centuries as the blood corpuscle is to us today. Devils were believed to exist by *everyone* who lived in the 16th century. Every mental disturbance was due to devils inside the body, who caused the pains and the convulsions, or devils outside, who were the cause of the hallucinatory voices. The greatest medical mind of that time, Johann Weyer (1515–1588) could only deny that being inhabited by a devil was not a crime, but only a misfortune. When Paré, the leading surgeon of his time, saw a magician performing tricks in the court of King Charles IX, he whispered in the King's ear, "Thou shalt not suffer a witch to live!" Paré believed that devils could assume any shape, enter the body, or "put nails and other objects into the stomachs of bewitched (psychotic) individuals."

The greatest exorcist of his day and a contemporary of Mesmer, was Father Gassner (1762). He "cured" multitudes of bewitched persons by exorcising the devil. Mesmer insisted that Father Gassner's exorcisms were superstitions, whereas his Animal Magnetism was a physiological reality without ever becoming aware, that he, also was using, what was later to be recognized as suggestion.

Mesmer began by using magnets, but by 1775 he had concluded that whatever he touched became "magnetic" and that he, himself, was the source of Animal Magnetism. He had begun to realize that the patient must cooperate and want to get well. That is, there must be a "rapport" between the patient and his physician. This became the foundation stone for modern psychiatry. Mesmer's clinical experiments were severely criticized by the leaders of the medical profession as being pure quackery, and in 1778 Mesmer left Vienna for Paris.

It was the hectic period before the revolution (the fall of the Bastille was in 1789). The great Voltaire and Diderot were still alive. Religion was out of fashion, but superstition flourished. The French Academy of Medicine—like that of Vienna, at first was skeptical, and then openly hostile. But the times were particularly favorable to Mesmer's theories. A veritable stream of silver poured into his pockets. It became the height of fashion to visit Mesmer and to experience the effects of "animal magnetism." As the patients multiplied, Mesmer was compelled to devise a method of group treatment . . . the Baquet . . . which permitted a number of persons to sit around a large tub filled with 'magnetized' iron filings, broken glass and water from which protruded iron bars. When Mesmer, dressed in flowing robes, would touch each subject with his wand, their hands would soon drop from the iron bar and they would develop a somnambulistic "crisis" or convulsion. Mesmer was convinced that the "crisis" was necessary for healing. It was as if Freud would have stopped his investigations at the early phase of his studies of hysteria when he believed that "abreaction" (the emotional upheaval associated with the recovery of past traumatic events) was the only cure.

The French Academy finally appointed a commission in 1784 to study Mesmer's methods, and concluded that the effects, if any, were due to imagination. "Imagination is everything—magnetism nothing."

Dr. Charles d'Eslon, one of the few doctors who had remained loyal to Mesmer after the skeptical report of the commission, said, "If Mesmer had no other secret than he has been able to make the imagination exert an influence on health, would he not still be a wonder doctor? If treatment by the use of imagination is the best treatment, why do we not make use of it?" With these wise words, d'Eslon laid the foundation of modern psychotherapy. But his advice was not heeded by his fellow practitioners who continued bleeding and purging their neurotic patients.

The scathing criticism of the commission had thoroughly discredited Mesmer's teachings, and he left France bitterly disappointed. The rest of his life was uneventful from a historical point of view. He died in 1815 at the age of 81 almost forgotten. Mesmer's methods were taken up by laymen who organized a number of Societies of Harmony. A retired artillery officer, Armand Jacques Chastenet, the Marquis de Puységur made the discovery of artificial somnambulism. He had "magnetized" the trees on his estate, and when his patients approached a tree, they were "magnetized" and went into the trance state. In 1874 a fourteen-year old boy, Victor Race obeyed all of Puységur's orders while in the trance state, and recovered from his complaints, without developing a "crisis" in the orthodox Mesmerian fashion. When he awoke, he could not recall what had happened. What was more interesting was that while he was in the trance state, Victor could diagnose other patients' illnesses. It soon became the fashionable trend for each magnetist to have his own "lucid somnambulist" who would make the diagnosis for him.

John Elliotson (1791–1868) was the Professor of Theory and Practice of Medicine at the London University. He had introduced the stethoscope to his colleagues in Great Britain and was author of a popular textbook on Human Physiology. He became involved in Animal Magnetism (in 1837), was severely ridiculed and asked to resign his professorship. Nevertheless, he never gave up the practice of Mesmerism and published a journal, *The Zoist*, in which he and Dr. James Esdaille described many examples of painless surgery while the patient was in the trance state. In 1842 Ward amputated a leg of a Mesmerized patient, but the profession lost interest after chloroform became available in 1847.

James Braid, a successful Manchester surgeon, believed that the first Mesmeric seance which he witnessed in 1841 to be a "humbug." However, he returned to re-examine the evidence and convinced himself that the phenomenon of the trance-state was genuine. Braid stated that the "magnetic fluid" was a myth, and developed a physiological explanation for what he later called "hypnosis." The trance state, he believed, was the result of eye fatigue from fixating the gaze upon a bright object. His book, *Neurypnology or the Rationale of Nervous Sleep*, was published in 1843, and attempted to prove that hypnosis had nothing in common with the animal magnetism of Mesmer. In 1860, the year before he died, Braid's essay on hypnotism (Braidism) was sent to his friend, the Professor of Surgery at the University of Paris, Dr. Alfred Armand Velpeau, to read before the French Academy of Science. In the audience was a provincial student from Nancy who later became a country practitioner. This young doctor, Ambroise Auguste Liébault, told his thrifty patients that he would hypnotize them free of charge, but if they asked for medicine, he would have to ask a fee. The result was that he hypnotized most of his patients, and made the startling discovery that the secret of hypnosis was "suggestion." "All one had to do," said this country practitioner, was "to get the patient to look at your eyes or finger and to quietly tell him that he is getting drowsy," and soon the trance state would follow. Liébault was attacked by his colleagues as being even "madder than Mesmer" but he went on hypnotizing

his patients. His only book, *Sleep and the States Analogous to It*, sold only one copy, but it attracted a great pupil.

He was Hyppolyte Marie Bernheim, the Professor of Medicine at Nancy. He became the most famous hypnotist of his time, and among the students, who flocked to his clinic, was Freud. Bernheim also insisted that hypnosis was nothing but induced sleep and that the entire explanation lay in the word, "suggestion." His book, *De La Suggestion* (1884), is still considered to be one of the best on the subject. But the doctors had more exciting events to pay attention to. Koch had discovered the tubercle bacillus in 1882; Pasteur's victory over Anthrax occurred in 1883. Gaffky had isolated the Typhoid Bacillus and Loeffler described the Bacillus of Diphtheria in 1884. Bernheim had more to offer the medical profession, than the therapeutic effect of the trance state. He taught all who listened that the trance was itself the result of suggestion, and suggestion was just as effective in the normal waking state.

The world's greatest neurologist, Jean Martin Charcot had a different opinion. Hypnosis, he insisted, was an induced artificial neurosis closely related to hysteria. Charcot's assistants at the Salpêtrière trained a dozen patients to prove that the Master was correct. The country practitioner, Liébault, and Bernheim had hypnotized thousands to prove that hypnosis was a normal phenomenon which could occur in the average person. Freud also studied with Charcot and translated both his and Bernheim's publications.

In 1882 Charcot presented a paper on Hypnotism before the French Medical Academy. It was a historic occasion because the Academy had thrice rejected the validity of hypnotic phenomena. In time, Bernheim's opinion won out, but it was an empty victory. After Charcot died in 1893, the interest in hypnotism waned, was ridiculed, and died out altogether. It became unfashionable and cautious doctors refrained from practicing such dubious procedures. Suggestion, like Animal Magnetism, had run its course. It was devoid of any definite, systematized psychopathology, and the medical world waited for a new idea.

It came at the turn of the century in the form of Freud's teachings. He began by using hypnosis, like his teacher, Bernheim, but when Freud dropped hypnosis to develop the technique of "free-association," "the baby was thrown out with the bath water." It took two World Wars to prove that hypnosis still was a valuable therapeutic procedure.

The present era in hypnosis begins with the work of such investigators as Erickson, Wolberg, Kline, Schneck, Conn, and Rosen. The Society for Clinical and Experimental Hypnosis was organized in 1949. Since then, there has been a continual increase in the number of devoted, well trained workers, and several excellent new texts, and hundreds of good papers have been published. Hypnosis has come again; this time to stay. As the astute Pierre Janet has stated, "It is not everything, but hypnotism counts for something after all."

What about our present conception of hypnosis? Just as Mesmer could not conceive of hypnotism, Charcot could not think in terms of suggestion, and Bernheim could not dream of hypnoanalysis. At present, there are a number of theories which try to explain the phenomena of hypnosis. However, no physiologic theory is available which accounts for the phenomena of hypnosis. For example: Pavlov's hypothesis, that hypnotism is identical with cortical inhibition or sleep, is not in keeping with the results of physiological studies, which demonstrate that hypnosis is identical with the normal waking state.

The induction of hypnosis involves an intimate interpersonal relationship. All subjects do not behave alike while in the trance and every skill of the hypnotist is required to "deepen" the trance state.

In hypnosis, the subject's electroencephalogram, and electrocardiogram are within normal limits, and so is respiratory activity and the Basal Metabolic Rate. (The B.M.R. decreases

10% in sleep). Hypnotic suggestion of muscular work can increase the oxygen consumption and the pulmonary ventilation of the resting subject. However, the specific dynamic action of protein cannot be duplicated or abolished in the trance state. The pulse amplitude, volume, and form are the same as it is in the waking state, and so is the patellar reflex. Tachycardia and changes in the electrocardiogram can be produced by hypnotic suggestion. Suggestion of thermal changes do not modify the digital circulation. Skin blisters may result from direct suggestion and a cutaneous wheal from allergic substances can be modified by hypnosis. Herpes Labiales can be precipitated by suggestion. The blood count and blood chemistry remain unchanged during the induction of hypnosis, and direct suggestion does not alter the blood glucose level. Indirect suggestions associated with emotional changes, do effect the blood glucose levels in diabetics. In a case of hysterical hyperventilation, the pH of the blood was altered under hypnosis from 7.61 to 7.38, and the respiratory rate from 110 to 18, and the CO_2 returned to normal.

Direct hypnotic suggestion and hypnotically induced dreams can inhibit hunger contractions in the fasting subject. What is of more interest, is that the gastric secretion changes, as do the enzymes, depending upon the specific type of food which is suggested. Alteration of renal function with hypnosis is doubtful, but there is a 12.4% increase in the amount of work done (the critical ratio is 4.46) when the patient's resistance to ergograph fatigue is measured. In the latter case, the selective amnesia for pain and fatigue may increase the factor of motivation.

The conditioned reflex is acquired with even greater facility during hypnosis than in the waking state. Post-hypnotic induced deafness inhibits the conditioned response to auditory stimulus. But hypnotically induced blindness does not prevent the pupillary contraction to light. Vestibular nystagmus and falling reactions (Barany Chair) remain unchanged by suggestion. Scopolamine Hydrobromide, and an Nitrous Oxide and Oxygen mixture may increase the effect of hypnotic suggestions. The facial flinch, the respiratory, cardiac, and galvanic skin response are reduced by hypnotic anaesthesia. (There is a 30% rise of the pain threshold, as measured by the Wolf-Hardy-Goodall technique).

There have been twelve different theoretical explanations of hypnosis—one contradicting the other . . .

(1) Hypnosis is the result of a "force emanating from the operator."

(2) It is a pathological manifestation of a neurosis which resembles hysteria.

(3) It is due to neurophysiological changes in the cortex and adjacent regions. (Bennett referred to "suspension of activity in the white substance accompanied by increased activity of the remainder of the cerebrum"; Heidenhain spoke of "an inhibition of the ganglion cells"; and Hart believed it was due to "cerebral anaemia.")

(4) It is a form of immobilization cataplexy, which is like the death-feint in animals.

(5) It is similar to sleep or a sleep-like condition. Pavlov has postulated that hypnosis is the result of a "focus of central excitation with a surrounding area of inhibition" such as occurs in sleep.

(6) It is a conditioned response in which words become "conditioned" to both internal and external stimuli, and in this manner they can effect bodily changes. Suggestion is defined as being a "typical conditioned reflex" and hypnosis becomes the result of "abstract conditioning."

(7) It is a state of dissociated consciousness in which the part which has "separated off" still functions as a unit and remains a kind of secondary consciousness.

(8) It is a kind of transference that relates to earlier parent-child relationships.

(9) It is a form of prestige suggestion.

(10) It is a form of goal-directed striving in which the subject behaves as it is defined by the hypnotist (role-taking).

(11) It is a psychosomatic manifestation, and due to immobility, monotony, and maximal attention to one group of stimuli with the loss of ego boundaries and an incorporation of the hypnotist as Super-Ego. The voice of the hypnotist becomes "an extension of the subject's own psychic processes."

(12) It is the outcome of "several over-lapping and interacting processes"—(a) Ideomotor action (the result of imagining an act), (b) Homoaction (neuromotor enhancement), (c) Generalization of suggestibility (abstract conditioning due to general resemblances).

The plethora of theory only helps to emphasize the fact that there are significant differences between the waking state and the altered state of consciousness which is termed hypnosis.

(1) The kind of thought process which is found in hypnosis is primary, archaic and includes "a sense of timelessness in which logic and order do not regulate."

(2) The kind of emotion during hypnosis permits a freer access to what is controlled in ordinary behavior, and therefore, explosive outbursts of rage or fear are frequently reported.

(3) The kind of self-awareness in the trance state is "less aware of being aware," with more bodily awareness, less humor and less perspective.

(4) The kind of mobility is of the symbolic uninhibited type such as may occur in states of drug intoxication and in certain psychoses.

The subject tries in every possible way to anticipate the wishes of the hypnotist so that each operator obtains the psychological contents which he is seeking. The direction of attention is directed toward the inside with little need to respond to external stimuli with the exception of the voice of the hypnotist which the subject experiences at times as if it *were part of his own thoughts*, and at other times, as being a "real" voice.

Modern hypnosis makes relatively little use of the authorative approach in which the hypnotist "orders" the patient to go into the trance state. The present day hypnotist utilizes age-regression techniques and re-vivication, automatic writing and drawing, parallel experimental neurosis, symptom-substitution, crystal gazing, suggested dreams, acting out of phantasy, intensification, and recognition of emotions, and abreactions against key figures.

WHAT EVERY DOCTOR SHOULD REMEMBER ABOUT HYPNOSIS

1. It is a genuine phenomenon which can be utilized therapeutically.
2. It can be used:
   (a) for relaxation
   (b) to relieve pain
   (c) to facilitate the recall of traumatic events
   (d) to alleviate anxiety
   (e) to regress the patient to earlier life periods in order to recapture repressed, significant memories.
3. The average person can become a hypnotist.
4. Normal, intelligent, muscular persons are the best subjects for hypnosis, and not the neurotic, feeble-minded or psychotic individual.
5. The patient will not do anything contrary to his moral code if it is directly suggested. But, if he is told to do so, "for his country," he may steal or attack any person who is pointed out as being a danger to himself or to his loved ones.
6. The patient awakens when he is told to do so with very few exceptions. It takes much more skill to induce the trance state than to arouse the patient, who, if let alone, will "sleep it off." Failure to awaken (to "dehypnotize") is due to:
   (a) the patient is hostile to the hypnotist and wants to remain longer in the trance so as to "even things up"
   (b) the patient "enjoys" being in the relaxed trance state and does not care for the time being to return to his "troubled" life situation.

   The effective handling of such resistance and

hostility should be part of the training of any hypnotherapist.

7. Neither amnesia nor the "deep state of hypnosis is necessary for therapeutic success since "cures" can be achieved with suggestion in the "light" stages of hypnosis. It also is not necessary for the patient to "talk" while in the trance state. Excellent results can be obtained without "probing" for psychological contents.
8. The hypnotist only "sets the stage"; it is the patient who puts himself to sleep by doing what is expected of him. Even when the patient is skeptical and lacks faith, it is what he does rather than what he says, which indicates the degree of his unconscious need to submit to hypnosis.
9. As in *every* therapeutic procedure, the patient must not only cooperate with the doctor, but he must want to get well if excellent results are to be obtained.
10. The dangers of hypnosis are those which accompany *every* psychotherapeutic relationship. Any one who hypnotizes a prepsychotic patient or a psychopath without knowing what he is getting into, is like the fool who ventures where angels fear to tread. Psychiatric training is an absolute prerequisite for intensive hypnotherapy. The average practitioner should confine his hypnotic efforts to the preparation of the patient for surgical procedures, the alleviation of pain (analgesia and anaesthesia) and postoperative comfort.

Hypnosis was developed by doctors to help patients; it belongs to medicine. Our courageous medical forefathers have made great personal sacrifices to bring it to the attention of the medical profession. The least we can do is to honor their memories, and to deeply appreciate the healing gift which they have handed down to us.

2325 Eutaw Place
Baltimore, Maryland

REFERENCES

BRAID, JAMES, *Neurpynology or the Rationale of Nervous Sleep*, London, J. Churchill & C. Black, Edinburgh, 1843

BRENMAN, MARGARET, *The Phenomena of Hypnosis in Problems of Consciousness* (1st conference) Edited by H. A. Abramson, New York, Joseph Macy, Jr. Foundation, 1951

BRAMWELL, J. MILNE, *Hypnotism*, London, W. Rider & Son, Ltd., 1913

CIBA SYMPOSIA, March and April, 1948

CONN, JACOB H., *Hypnosynthesis; Hypnosis as a Unifying Interpersonal Experience*, J. Nerv. & Ment. Dis., **109:** 9–24, 1949.

Hypnotic Relaxation and Analysis; Chapter in Therapy Through Hypnosis, Ed. by R. H. Rhoades, N. Y. Citadel Press (pp. 194–212), 1949.

Hypnotherapy of the Hysterical Depressed Patient, J. of Exp. and Clinical Psychopath. **13:** 152–163, September, 1952.

Hypnotherapy of Chronic War Neuroses, J. Clin. & Exper. Hypnosis, **1:** 29–43, January 1953.

Hypnotherapy of the Sex Offender, Jr. Clin. & Exper. Hypnosis, **2:** 13–26, January 1954.

The Use of the Light Trance. Read at the Round Table on Hypnosis, American Psychiatric Association Meeting, Chicago, Illinois, May 3, 1956. (In press)

Medical Hypnosis, Pennsylvania Medical Journal, September 1956, **59:** 1156.

Hypnosis as Dynamic Psychotherapy. The Sinai Hospital Journal, **5:** 14–32, October 1956.

DECOURMELLES, FOVEAU DE, *Hypnotism*, London, G. Rutledge & Sons, Ltd., 1891.

DELEUZE, J. P. E., *Practical Instruction in Animal Magnetism*, New York, D. Appleton & Co., 1850.

ERICKSON, MILTON H., *Hypnosis in Medicine*, The Medical Clinics of North America, May 1944.

FRANKAU, GILBERT, *Mesmerism by Doctor Mesmer* (1779), London, MacDonald, 1948.

GOLDSMITH, MARGARET, *Franz Anton Mesmer*, New York, Doubleday, Doran & Co., Inc., 1934.

GORTON, B. E., *The Physiology of Hypnosis*, Psychiatric Quarterly, **23:** 317–343; 457–485 (1949).

JANET, PIERRE, *Psychological Healing*, Vol. 1, Ch. 8, New York, The MacMillan Co., 1925.

KLINE, MILTON V., *Hypnodynamic Psychology*, N. Y., The Julian Press, 1955.

LECRON, LESLIE M. AND BORDEAUX, JEAN, *Hypnotism Today*, New York, Grune & Stratton, 1947.

MAJOR, RALPH H., *Faiths That Healed*, New York, D. Appleton, Century Co., 1940.

MOLL, ALBERT, *Hypnotism*, London, Walter Scott, Ltd. New York, Charles Scribner's Sons, 1899.

PATTIE, F. A. Personal Communication on the contribution of Richard Meade to Mesmer.

ROGERS, SPENCER L., *Early Psychotherapy*, Ciba Symposia, April, May, 1947.

ROSEN, H., *Hypnotherapy in Clinical Psychiatry*, New York, Julian Press, Inc., 1953.

SCHNECK, J. M., *Hypnoanalysis, Personality*: Symposia on Topical Issues, New York, Grune and Stratton, **1:** 307, 1951.

WEITZENHOFFER, ANDRE M., *Hypnotism*, New York, John Wiley and Sons, Inc., 1953.

WOLBERG, L. R., *Medical Hypnosis*, New York, Grune and Stratton, 1948.

THE USES AND ABUSES OF ACTH AND CORTISONE[1]

PANEL DISCUSSION

MODERATOR: A. McGehee Harvey, M.D.[2]

PANEL MEMBERS: Joseph Lee Hollander, M.D.
Lawrence E. Shulman, M.D.
Leslie N. Gay, M.D.
Raymond C. V. Robinson, M.D.

A. McGEHEE HARVEY, M.D.

Mr. President, Members of the Society, and Guests: it is a privilege for me to be the moderator of this symposium this evening for many reasons, not least among them the fact that as moderator I had the privilege of choosing this very distinguished panel.

It has been a number of years now since ACTH and cortisone first came into usage. I think all of you recall the great excitement in 1949 when Dr. Hench and his collaborators first announced the immediate effects of cortisone in patients with rheumatoid arthritis.

Within the next year very extensive clinical trials were carried out in a number of centers with cortisone and with ACTH. These trials were expanded far beyond the usage of these hormones in rheumatoid arthritis. The hormones were utilized in various allergic conditions, drug hypersensitivity reactions, various blood dyscrasias, eye diseases, diseases of the skin, and every conceivable clinical condition in which there might have been any possible benefit.

As you know, a great many important and interesting findings resulted. These hormones came into wide usage, and in the ensuing years new preparations were developed. First of all, Dr. Astwood and others devised new methods of purifying ACTH. The preparations that were utilized in the beginning had a potency of only one unit per milligram and that has been improved upon over a hundred times by his work and that of others.

Oral cortisone was developed; hydrocortisone was brought into the picture and the local application of hydrocortisone, for many conditions was tried.

During this period, there gradually emerged from this wealth of information certain rather simple rules for the safe usage of these hormones, and with more experience some of the problems relating to the long-term usage of these materials became more clear. With improved methods of production and as a result of healthy commercial competition, the prices of these materials have been lowered and as a result of all these things, almost every practicing physician runs into some problem almost daily in regard to their utilization.

It is the purpose of this panel tonight to try and present in a rather short period of time a practical review of all of the information that has been gathered in this five-year period which is a difficult task. But I hope that as a result, we can at least provide for you a summary of the practical aspects of the situation at the moment —the indications for the use of these materials; the contraindications; the methods of administration and particularly the complications that one must try and anticipate in order to avoid. I hope also that the questions, as far as can be, will be answered concerning the differences between cortisone and hydrocortisone and ACTH. Under what circumstance do you use one as opposed to the other?

[1] Presented before the Baltimore City Medical Society on Friday, March 19, 1954, at the Medical and Chirurgical Faculty Building, 1211 Cathedral Street, Baltimore 1, Maryland.

[2] Professor of Medicine and Director of the Department of Medicine, The Johns Hopkins University School of Medicine.

I would like to emphasize that in spite of all the extensive experience that has been acquired during this period of time, not one disease to my knowledge has been shown to be cured by one of these hormones. The active manifestations of the disease may be suppressed, but there is as yet no evidence that it provides a cure for any thing.

Now, with no further introduction, as the hour is late, I think it is best to get started.

The first speaker on the Panel this evening is a friend of mine of long standing. I first got to know him when we both attended some of the earlier conferences that were held in 1949 and 1950, in regard to accumulated experiences at that time with these various hormones. Dr. Joseph Lee Hollander.

Johns Hopkins Hospital
601 North Broadway
Baltimore 5, Maryland

RHEUMATIC DISEASES

JOSEPH L. HOLLANDER, M.D.*

During the past 5 years so much has been said and written about the actions and uses of cortisone, ACTH (corticotropin) and hydrocortisone, that it is difficult for anyone to evaluate the true place of these potent hormones in the management of rheumatoid arthritis, rheumatic fever, disseminated lupus erythematosus, periarteritis nodosa, or the other so-called "collagen diseases."

As a result of treating hundreds of patients suffering from rheumatism by means of one or more of these potent hormones we may draw some conclusions, but even now they must be considered tentative. Further long term observations will finally assess the true value of such therapy.

At present we are concerned because many physicians using the hormones, have either decided never to employ them again because of poor results they have seen in a few cases, or, if they were lucky and had no such adverse reactions in their patients, have gone to the other extreme and are now administering cortisone to practically every patient with an ache or pain. Both attitudes are obviously incorrect, and while the former may deprive many patients of needed relief, the latter practice of promiscuous use and random dosage is extremely dangerous.

Early "wonder drug build-ups" about cortisone, aided and abetted by the lay press, have now given away in some quarters to the opposite extreme—cries of alarm that these dangerous drugs are doing harm, producing deaths, and should be withdrawn. Obviously the truth lies in between. It is interesting how history repeats itself. In an old British Medical Journal, about the year 1810, appeared an editorial demanding that digitalis be forbidden in Medicine because "it cures no case of heart disease, produces poisonous effects on the body, and even can of itself kill." Fifty years later, a few years after ether had come into fairly widespread use, the number of deaths from ether anesthesia was alarmingly high, which led to an editorial in the Journal of the American Medical Association seriously questioning "the right of physicians to risk the lives of patients by rendering them unconscious, perhaps never to reawaken, from breathing such a dangerous vapor." Both of these agents, standard as they are in our present-day armamentarium, obviously were inexpertly used at the time the editorials were written, and

* Assistant Professor of Clinical Medicine, and Assistant Professor of Internal Medicine, The Medico-Chirurgical College, Postgraduate School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania.

such is the case with corticotropin and cortisone today.

Strangely enough, the analogy between these hormones and digitalis can be carried still further. Chemically, cortisone and digitalis are both steroids. The action of cortisone in rheumatic diseases is rather analogous to that of digitalis in cardiac failure—an amelioration of symptoms and improvement of function, *without effect on the cause of the disease.* Many arthritic patients are working today, in spite of their rheumatoid arthritis, who before taking cortisone hardly could care for their own most fundamental needs at home. They still have arthritis, but the pain is controlled, and their muscle power, nutrition, and ability to work have improved tremendously. They can live more normally in spite of their disease. Is this not analogous to the cardiac patients who could not climb stairs or get about without dyspnea, precordial pain, and edema of the extremities, who, after digitalization, can perform their regular jobs? In neither case has any cure been affected, and in this light we should review the action of these potent hormones in the treatment of arthritis, etc.

The choice of cases for cortisone therapy is also analogous to the choice of cardiac patients for digitalization. Just as we should not digitalize the mild or early cardiac who is not decompensated, so we are finding it foolish, costly, and even dangerous to cortisonize patients with rheumatic diseases which are mild, early, or low-grade, so that the patient, rheumatically speaking, is not "decompensated" to his disease.

It appears that practically every potent agent in medical use is really a two edged sword, with inherent limitations and toxic effects. Master hormones of the body itself cannot be administered completely in a physiological way, even as substitution therapy. We do not know how much corticotropin the pituitary secretes at rest, or under various stress situations, nor do we know the variations between different individuals and in different age groups. We have only a vague idea of how much hydrocortisone the adrenal glands produce under varying situations, and find that cortisone is produced only in very small amounts. How, then, can we administer these hormones intelligently? Only by the painful process of trial and error. We have tried many times, and we have also erred many times, but we finally seem to be getting closer to the truth.

We think we can now define the optimum dose of cortisone, or corticotropin, or of hydrocortisone as the minimum daily dose which will keep the patient in relative comfort and functional usefulness—not the amount required to produce practically complete suppression of his symptoms, as was formerly believed. This optimum dose requirement may vary under differing conditions of stress—such as intercurrent infection, surgical operation, increased physical activity, or emotional crises. Under such conditions the intake of hormone should always be increased, not decreased or quickly withdrawn, as was earlier supposed. Many of the postoperative deaths in patients who had been receiving cortisone can be attributed to superimposed acute adrenal insufficiency from sudden withdrawal of cortisone or ACTH, the very agents which had produced the perforation of the ulcer, or masked the infection making the operation necessary. It is perfectly true that the action of these hormones in inhibiting fibroblastic activity can lead to perforation of the peptic ulcer, or the spread of a hidden infection, but the danger of sudden adrenal insufficiency superimposed on a stress of this type is often too much for the body to withstand. Antibiotics as needed, and surgery, as needed, with increased amounts of cortisone or corticotropin will carry the patients through the period in relative safety.

Whereas we had previously recommended doses of cortisone of 100 mg. or more per day, we now seldom exceed 50 or 75 mg. per day in most cases. Oral hydrocortisone seems in many cases somewhat more potent, milligram for mil-

ligram than cortisone, so doses per day range from 40 to 60 mg. Corticotropin (ACTH) was formerly poorly assayed and varied in potency so the dose given was usually high enough to be sure of an effect. Always at a disadvantage because it must be injected intramuscularly, this hormone has not been employed as widely as orally administered cortisone. ACTH has the advantage, however, that it acts very promptly, and can be withdrawn more quickly without as prompt a relapse of the disease. It is often preferred for acute emergencies and for conditions which are severe but of short duration such as acute exacerbation of disseminated lupus erythematosus, acute gout, drug reactions, and the like. It is also useful in short courses for "reviving" adrenal glands atrophied by long term cortisone administration. With the newer highly purified long acting forms of corticotropin, doses up to 30 units per day are usually sufficient.

Cortisone or ACTH therapy have produced diabetes in some individuals, but the number is small—less than 2 per cent. Even these are believed to be patients with a latent diabetic tendency—those with a "low insulin reserve." We can treat patients with diabetes and arthritis using both insulin and cortisone concurrently, and in minimal amounts.

Cortisone and Corticotropin have been blamed for increased incidence of thrombophlebitis in patients receiving them. A careful scrutiny discloses, however, that patients with rheumatoid arthritis have a higher incidence of such episodes than normal anyway. Furthermore, most of the reported cases had the thrombotic episode as the hormone was being, or recently had been withdrawn or reduced. The number of such cases is extremely small, so this constitutes no great danger. The development of severe Cushing's syndrome, or of osteoporosis leading to pathological fractures are definite risks.

Again, as with digitalization of the decompensated cardiac patient, in whom we expect to maintain administration of the drug indefinitely, so must we plan to continue the rheumatoid arthritic on cortisone indefinitely once we have considered his disease severe enough to require it. Some cases do develop side effects in spite of all precautions, and some do relatively poorly on the hormone. If the amount of benefit is small, and the side effects are out of proportion, the cortisone or hydrocortisone should be discontinued. This must never be done precipitously, or the effect may be disastrous. Severe "rebounds" in the arthritis, or secondary adrenal insufficiency usually follow such a practice. Cortisone or hydrocortisone may be withdrawn by reducing the daily dose no faster than by decrements of 12.5 mg. in any ten day period. When a daily dose of 25 mg. is reached, it should probably be reduced still more gradually—no more than a 5 mg. reduction in the daily dose in any ten day period. We must literally "wean the patient away from the hormones," giving the adrenal glands a chance to resume normal activity gradually. A few small daily injections of corticotropin at the end of the reducing period may help reawaken adrenal activity. ACTH (corticotropin) need not be reduced quite so gradually, but must not be withdrawn too precipitously either. A two week "tapering off period" with slight reductions in dose every few days has proved easiest on the patient.

The advent of the smaller dosage era of cortisone administration has seen a much smaller incidence of psychotic episodes, massive edema, acute cardiac decompensation, osteoporosis, perforated ulcers, and other severe side effects.

Local Hydrocortisone in Joint Disease

In 1951 we demonstrated that hydrocortisone acetate injected intra-articularly into an arthritic joint produced a fairly lasting local palliation of pain and swelling without evident systemic effects. Extensive clinical use, both in our clinic and in those of many rheumatologists (we have now given over 14,000 injections to over 1200 patients) has confirmed that this intrasynovial hormone application is a practical aid in the local control of many types of rheumatic in-

flammation. If the arthritis is limited to one or a few peripheral joints, it can be controlled by repeated injections into each at intervals of one or more weeks, without the dangers attending the systemic administration of cortisone or hydrocortisone. The indications for employment of this method, techniques for injection, and results to be expected have been adequately described elsewhere. Careful aseptic precautions must be observed to avoid infecting the treated joint, but the technique need be no more complicated than for giving an intravenous injection in the office or clinic. Adverse effects are rare and self limited, and since this is much less hazardous than spinal puncture, thoracentesis, abdominal paracentesis or other such procedures usually entrusted to internes, physicians should have no fears in attempting the procedure. Like venipuncture, skill in technique must be aquired by training and practice. The local anatomy should be reviewed before attempting injection of the various joints, as the hormone must be placed in the joint space or bursal sac to be effective.

Intrasynovial hydrocortisone may suffice for treatment of localized forms of rheumatic disease, such as bursitis, traumatic arthritis, or tendonitis, but is only an adjunct in treatment of systemic diseases such as rheumatoid arthritis, collagen diseases, gout, or even osteoarthritis. It must therefore be coordinated with the general plan of therapy suited to the case, and may be used as a local adjunct to salicylates, gold salt therapy, butazolidin, or systemic cortisone, hydrocortisone, or corticotropin therapy in controlling inflammation and disability in the most severely involved joints. This has also proved a valuable adjunct in connection with orthopedic operations and physical therapy in the prevention and correction of arthritic deformities.

To sum up, we do not think ACTH or cortisone should be used in the milder forms of rheumatic disease, but only in severe and progressive cases. We now use cortisone, hydrocortisone, and ACTH in minimal effective doses, endeavoring to control, but not obliterate, the symptoms of the disease. We diligently watch for and guard against side effects. If complications arise which add increased stress to the patient, such as infections or surgical emergency, we temporarily increase rather than decrease or discontinue hormone administration. We do not precipitously stop the hormones, leaving the patient to dangle by the slender thread of his atrophic adrenals. We do not believe cortisone is a cure for any rheumatic disease, but represents an agent capable of suppressing the symptoms and signs of an incurable, severe, chronic disease enough to permit the victim increased ability to live and produce. Cortisone may not add years to the patient's life, but it does add life to his years.

Certainly cortisone, hydrocortisone, and corticotropin have proved themselves as useful in treating severe forms of arthritis and other collagen diseases as insulin for diabetes, or digitalis for cardiac disorders. The only real difference is that we have not yet determined exactly the indications, contraindications, and best methods for administration of these hormones, and that is our continuing task in the years to come.

204 Maloney Clinic Building
Hospital of the University
of Pennsylvania
36th and Spruce Streets
Philadelphia 4, Pennsylvania

DR. HARVEY: We will save handing out any question to the members of the Panel until all of them have made their presentation.

The next speaker is Dr. Lawrence E. Shulman, Instructor in Medicine at The Johns Hopkins University School of Medicine, who will talk on general considerations in regard to the use of these hormones and on their use in other collagen diseases and drug hypersensitivity reactions.

GENERAL CONSIDERATIONS CONCERNING THE CLINICAL APPLICATION OF ACTH AND CORTISONE

LAWRENCE E. SHULMAN, M.D.[1]

This is to be a brief discussion about: (1) the disease states in which ACTH and cortisone may be useful; (2) some of the details of hormonal administration; and (3) some of the contraindications to and complications of such therapy.

Indications for ACTH and Cortisone

The first category of illness includes certain endocrine diseases, such as acute or chronic adrenocortical or anterior-pituitary insufficiency, in which ACTH or cortisone administration provides specific replacement therapy. Cortisone has greatly facilitated the treatment of Addisonian crisis and in small doses has restored many patients with the chronic form of this illness to full activity. In pituitary insufficiency it may seem more logical to use ACTH than cortisone, but in practice many patients seem to become resistant to ACTH and cortisone has proven more reliable. An interesting endocrine application is in the adreno-genital syndrome in which there is virilism due to an excessive output of androgen by the adrenal cortex. As shown by Dr. Lawson Wilkins small doses of cortisone can cause many of the masculine signs to regress and the abnormally high levels of 17-ketosteroids in the urine to be reduced to within normal limits. This is presumably the result of suppression by cortisone of the production of ACTH by the anterior pituitary and in turn, a lowered output of adrenocortical androgen.

A second group of illnesses in which these hormones may be useful are acute, non-infectious, inflammatory states. These include severe allergic reactions to drugs such as penicillin or serum sickness, as well as non-allergic inflammation, as in the eye. These illnesses are usually self-limited, but hormone therapy is justified in severe cases not responding to other less dangerous therapeutic measures. The short course of treatment usually needed is safe and not costly.

The use of ACTH or cortisone in the third category is controversial. This consists of a variety of serious chronic diseases characterized by an undulating course with periods of activity and quiescence; the causes of which are usually unknown; for which there is usually no other satisfactory therapy or other forms of therapy have failed; and in most instances of which ACTH or cortisone may afford impressive improvement during periods of disease activity. Because of their chronicity it is not yet possible to determine whether or not hormonal therapy has prolonged life. In these illnesses the decision to institute therapy depends on the seriousness of the disease, the severity of the disease in a given patient, the organ systems involved, the probable benefits to be expected on the basis of the accumulated experience, the anticipated length of treatment, and the severity of any contraindications.

Such illnesses include rheumatoid arthritis and rheumatic fever, which Dr. Hollander has discussed and intractable bronchial asthma which Dr. Gay will tell us about. Another good example is sarcoidosis, a spotty generalized illness with variable and unpredictable activity, which is usually not fatal unless it happens to involve in a critical manner a vital organ such as the lungs or the heart. In a patient with skin nodules and a few laboratory abnormalities as the sole manifestations of disease, ACTH or cortisone treatment with its attendant risks is hardly warranted. However, in a patient with advanced pulmonary disease and cor pulmonale or severe uveitis certain risks might be taken.

The fourth and final category are the adjunctive uses of ACTH or cortisone. To illustrate, these hormones may be helpful in reducing the activity of fulminating ulcerative colitis in

[1] Assistant Professor of Medicine, The Johns Hopkins University School of Medicine.

preparation for abdominal surgery or in reducing bleeding in patients with thrombocytopenic purpura prior to splenectomy.

Details of Administration

ACTH was first produced as a lyophylized powder to be mixed with physiological saline solution and injected intramuscularly every six hours. The initial daily dose was usually 100–120 units. Subsequently, it was found that if given intravenously as a slow drip over an eight-to twelve-hour period daily much smaller quantities (roughly one-fourth of the daily intramuscular dose) were needed and there was greater assurance that the hormone had reached the adrenal cortex for stimulation. More recently, greater purification of ACTH by the method of Dr. Astwood has resulted in a preparation of ACTH in gelatin which lasts 12 to 18 hours. The total daily dose is roughly twice that used in the intravenous drip.

Cortisone first appeared as the acetate in a microcrystalline suspension for intramuscular injection. It was relatively slow-acting, maximal effects not being reached until 24 to 48 hours after a single injection. For this reason, in its early use cortisone was thought by some to be inferior to ACTH, the responses being less dramatic. Intramuscular cortisone may be given as infrequently as every 24 hours, but in high doses the large volume to be injected may make more frequent administration desirable. With the introduction of oral cortisone, clinical responses more rapid than those seen with ACTH were at times observed. Precisely how frequently oral cortisone should be given is debatable. We have the impression that more frequent administration is needed in more acute illness. This stems from observing the complete disappearance of the manifestations of acute severe serum sickness within one hour after taking 100 mg. cortisone orally only to recur in full flower one hour later. On the other hand, in some patients with more chronic illnesses oral doses every six to eight hours seem to result in uninterrupted beneficial effects. Initial daily doses for cortisone, given either orally or intramuscularly, are in the neighborhood of 300 mg.

An experimental solution of cortisone for intravenous administration is currently being tested and may prove useful in certain acute emergencies and in patients unable to take oral medication. Cortisone has also been incorporated into an ophthalmic ointment or solution.

Compound F, hydrocortisone or hydrocortone, as it is variously called, is available in the same preparations as those containing cortisone. Hydrocortisone-acetate when given intramuscularly seems to be absorbed even more slowly and less reliably than is cortisone and therefore is of little value. On the other hand, as Dr. Hollander has shown, when injected intra-articularly, it is very effective, much more so than cortisone. Responses following oral administration are prompt. Comparative studies have shown that the dosage of oral hydrocortisone is roughly two-thirds that of cortisone. It is said that there are fewer side reactions with hydrocortisone than with cortisone but this may be only the result of the smaller doses needed.

Dr. Hollander outlined the dosage schedules for those patients with a chronic illness such as rheumatoid arthritis in whom prolonged treatment is contemplated. In patients with more acute illnesses or with acute flareups of chronic illness the initial doses should be higher, 30 units highly-purified ACTH in gelatin intramuscularly every 12 hours or 50 mg. cortisone orally every four hours. These doses are continued until either a maximal effect has been reached or side-reactions appear, at which point the dose is reduced in a stepwise manner.

If the manifestations of illness recur after the cessation of treatment, we do not immediately reinstitute treatment because in some illnesses a significant number of patients will recover if left untreated. We have designated this exacerbation and spontaneous recovery as the "rebound phenomenon." It may last for two or three weeks.

a highlight in therapeutics

ACHRO

Hydrochloride
Tetracycline HCl Lederle

*Reg. U. S. Pat. Off.

acknowledged as competent

Spontaneously acknowledged by physicians everywhere as an outstanding therapeutic advance, repeatedly confirmed during more than three years of clinical usage, ACHROMYCIN® Tetracycline ranks among the foremost in its field today... judged on its exceptional effectiveness against a wide range of pathogens, prompt control of infections most commonly encountered in medical practice, low incidence of side reactions, minimal emergence of resistance.

ACHROMYCIN is available in 21 dosage forms—each with full tetracycline effect—to meet the exacting requirements of modern medicine.

Lederle LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

When after a sufficiently lengthy remission the disease again becomes active, a similar circumscribed course of treatment is given and the patient again observed following treatment. However, if a remission does not take place or is of short duration and no serious contraindications are present, the patient is again treated and then placed on maintenance therapy, usually with cortisone.

What factors underlie the selection of hormone—ACTH or cortisone? In the early clinical trials several investigators noted that in some illnesses the responses to ACTH seemed to be more striking than those to cortisone. As stated above, this was probably the result of the relatively slow absorption of cortisone from the intramuscular injection site. Since the advent of oral cortisone no significant differences between the two agents have been observed. In patients unable to take medications by mouth and in whom a rather rapid response is desired, ACTH may be preferable. The ability to give cortisone by mouth is, of course, a great advantage, particularly in the ambulatory patient. Allergic reactions to cortisone, a steroid, have not been reported, but have occurred to ACTH, a foreign protein, although the incidence of these reactions has been much smaller with the recent further purification of ACTH. Because it is less salt-retaining than ACTH, cortisone is preferred in patients with cardiac or renal disease and perhaps hydrocortisone is better than cortisone.

Contraindications and Complications

Some of the complications of steroid therapy may have serious consequences; others may be of little importance. Some may be readily prevented by appropriate prophylactic measures; others, by refraining from treating patients demonstrating one or more serious contraindications to therapy. The first group of complications includes the external stigmata of Cushing's disease; acne, moon-facies, "buffalo hump," hirsutism, purple striae, etc. These usually appear after prolonged treatment on high doses. In the early days of hormone therapy their appearance caused grave concern, but they have subsequently been shown to regress readily after stopping treatment. They may, however, be cosmetically very unpleasant.

Another early fear, the emergence of diabetes, has not proven to be a large problem. Blood sugar elevations occur inconstantly, are usually small and are rapidly reversible. Moreover, the diabetes of hyperadrenocorticism is non-acidotic.

To prevent or minimize sodium and water retention the salt intake is routinely restricted to a maximum of four grams daily in all patients. In patients with cardiovascular or renal disease the salt intake is more strictly limited to as little as one half gram daily. The diet may be made more palatable by the use of a non-hazardous salt substitute. Body weight and blood pressure determinations should be recorded daily. Any sharp increase in either of these calls for further salt restriction and/or reduction in the dose of hormone.

Among the early patients treated with high doses of ACTH or cortisone there was an appreciable incidence of potassium depletion with a resultant metabolic alkalosis. This has largely been prevented by the routine administration of potassium chloride, three to six grams daily. In patients with renal disease some of whom may have a tendency to retain potassium it is best to give supplementary potassium only if there is clinical or chemical evidence of excessive potassium loss.

The presence of cardiac or renal disease should be considered a rather strong contraindication to hormone therapy, for in many such patients fulminating congestive failure or rapidly advancing uremia may appear under treatment. However, in a few patients with early and acute involvement of the heart or kidneys with a disease process responsive to steroid therapy, such as sarcoidosis or systemic lupus erythematosus, improvement in the function of these organs may occur during treatment.

It is now well-established that ACTH and cortisone in high doses may facilitate the acquisition of an infection or its dissemination from a

pre-existing focus. Moreover, many of the symptoms and signs of infection may be masked by treatment. Therefore, before instituting hormonal therapy the patient should be thoroughly searched for the presence of an infection and if one is found, appropriately treated. Moreover, during therapy careful observation is needed: every instance of fever or a sudden sharp increase in the white blood cell count in the course of therapy should lead to a suspicion of infection. If one is found, hormone therapy should be drastically reduced or stopped, whenever possible. The net effects of combined specific chemotherapy and hormone administration have not as yet been precisely defined.

Gray and his co-workers in Boston showed that in patients receiving moderately high, "therapeutic" doses of ACTH or cortisone the quantities of both hydrochloric acid and pepsin in the gastric secretions rose 200% on the average above pretreatment values. Moreover, in patients receiving these hormones there has been an increase in the incidence of active peptic ulceration, at times with perforation. Patients with pre-existing ulcers should not be given ACTH or cortisone unless very critically ill. In an attempt to minimize the incidence of peptic ulceration, we give all patients anti-acids between meals and at bedtime.

Many patients on ACTH or cortisone develop a euphoria, which is usually consistent with the degree of relief from symptoms. Others find it difficult to concentrate. A few become overtly psychotic. In most instances they were emotionally unstable before therapy. Thus, patients with labile personalities should be treated with these agents only for the strongest indications. Restoration of normal behavior occurs within one month after stopping therapy in most cases.

Some patients, having obtained during therapy much relief from highly distressing symptoms, such as severe pruritis, joint pain or dyspnea, find the return of symptoms following therapy unbearable, demand retreatment, and in some instances become habituated.

Immediately following a prolonged course of cortisone therapy the level of adrenocortical activity may be considerably reduced but usually returns to within normal limits within one to two weeks. However, in some instances adrenocortical responsiveness to stress may remain impaired for weeks or months. Recently a few deaths presumably on the basis of adrenocortical insufficiency have occurred after surgery or nonsurgical trauma in patients who had previously had long-term cortisone therapy. Such patients are best handled prophylactically by assuming that they will go into Addisonian crisis at the time of operation. For elective surgery cortisone is given intramuscularly, 100 mg. every 12 hours, beginning at least 48 hours before operation and continuing through the immediate postoperative period. For emergency surgery or severe trauma intravenous cortisone or hydrocortisone may prove useful.

Effects in Allergic Reactions to Drugs and the Collagen-Vascular Diseases

One of the best uses for ACTH and cortisone is in patients with severe acute allergic reactions to drugs. The response to treatment in most patients is prompt and complete. Both ACTH and cortisone are effective, but the most striking responses occur in patients given oral cortisone. In the very severe reactions the initial dose is 100 mg. followed by 50–100 mg. every two to six hours. Both dose and frequency of administration are determined by the severity of the reaction and the therapeutic response. Relapses which occur at times are in most instances mild and of short duration. If given in high doses cortisone can block an allergic reaction in the face of continuing the administration of the offending allergen. One such patient developed a severe reaction to penicillin early in the course of treatment for pneumococcal meningitis. No known efficacious alternative form of therapy being available, he was given cortisone in addition to the penicillin and the allergic reaction disappeared. Allergic reactions to ACTH have also responded promptly to cortisone therapy.

Many of the responses to ACTH or cortisone

treatment in patients with active systemic lupus erythematosus have been so dramatic that they resemble the crises of lobar pneumonia. Some manifestations of lupus, such as high fever, frequently disappear within the first 24 hours of therapy. Other manifestations, as skin involvement or pleural effusion, clear more slowly, usually after one to three weeks of therapy. Then there are still others, such as myocardial, renal or central nervous system involvement, in which hormonal therapy is at times beneficial and at other times not. In spite of obvious clinical improvement during therapy, many laboratory abnormalities, such as the L.E. cells, persist.

During the course of treatment the physician is frequently confronted with very difficult therapeutic problems in that many of the side reactions to ACTH or cortisone are very similar to the manifestations of active systemic lupus. To illustrate, when a patient being treated for lupus myocarditis develops peripheral edema, is the edema the result of the sodium and water retention of hormonal therapy or of increasingly active myocarditis? Should the dose of hormone be increased, unchanged, decreased or discontinued? Other examples include: fever which may be due to infection, active lupus or allergy to ACTH; abdominal pain which may be due to peptic ulceration or peritonitis due to lupus; and psychoses or convulsions, both of which occur in active lupus and in patients with various illnesses given ACTH or cortisone. Another question is whether or not it is better to keep patients with lupus on continuous treatment or to treat them with circumscribed courses only during periods of appreciable disease activity. Moreover, in a disease that may last for decades, it is impossible at the present time to determine whether or not adrenocortical therapy prolongs life. However, the results in some of the acute phases of illness have been so impressive that most patients are treated.

Similar striking effects of ACTH or cortisone therapy are seen in patients with polyarteritis nodosa, although in general the results are less encouraging than in systemic lupus erythematosus. A special feature of the steroid therapy of polyarteritis nodosa is the high incidence of infarctions which may occur at various sites. It is thought by some that the infarction may be associated with the "healing" process.

Most reports concerning the effects of ACTH or cortisone in scleroderma are discouraging. A few patients are relieved of symptoms such as dysphagia or malaise but there is little objective evidence of improvement. It is remotely possible that further extension of this slowly progressive disease may be impeded by continuous hormonal treatment.

Similarly, ACTH and cortisone appear to have no beneficial effects in most patients with dermatomyositis or polymyositis. There have been a few striking exceptions. One patient with such profound muscular weakness that he was unable to lift his hand from the bed, raise his head from the pillow, or swallow liquids had two dramatic responses after two circumscribed courses of ACTH and now, three years later, can load 100-pound sacks onto a truck.

In general, then, we feel that ACTH and cortisone are powerful, potentially hazardous agents which cure nothing. However, they may be very helpful in certain acute illnesses and in the acute phases of several chronic illnesses. With proper management they may be administered without undue risks to the patient. They are to be very much respected but not feared.

The Johns Hopkins University School of Medicine
710 North Washington Street
Baltimore 5, Maryland

DR. HARVEY: The next speaker I am certain you all know quite well. Dr. Leslie N. Gay is going to discuss some problems in regard to the use of these hormones from the point of view of the allergist.

ASTHMA

LESLIE N. GAY, M.D.[1]

The results of treatment of the asthmatic patient have been most discouraging to the general practicing physician in spite of the advantages of such drugs as ephedrine, aqueous adrenalin, adrenalin in oil, aminophyllin, and the oxygen tent. Temporary relief can be obtained by one or more of these remedies, but until the discovery of ACTH, sustained relief was the occasional rather than the usual reward for heroic measures. Another problem which confronts the internist is the limited hospital space available for the treatment of the chronically ill patient. The asthmatic patient, who falls into the category of the "chronically ill," unfortunately has attacks of dyspnoea so severe that he (or she) is completely incapacitated, often for many days. Paradoxically, he now becomes an acutely ill patient, but hospitalization is still difficult to obtain. The discovery of the hormones, Cortisone and Adrenocorticotropin, has opened up new avenues of approach toward a solution of a most distressing group of symptoms.

The survey comprises the treatment of seventy-eight ambulatory patients who suffered from severe bronchial asthma and emphysema. This clinical investigation was prompted by a combination of problems, preponderant among which were: severity of the symptoms; lack of beds for immediate admission; economic burden borne by the chronic ambulatory patient; hoplessness of outlook for the chronic bed-ridden patient.

Many of the patients had been under observation for a number of years prior to the discovery of ACTH. All therapeutic measures had been tried, including large doses of antibiotics, often with transient success. Thus the results of other methods can be compared with those of ACTH.

[1] Associate Professor of Medicine, The Johns Hopkins University School of Medicine.

Experienced physicians through recognized procedures can control the symptoms of the asthmatic patient in the early stages. But the more prolonged the duration of symptoms, and the older the patient, the more difficult it becomes to give sustained relief. The asthmatic patients in this report are divided into four age groups.

Group I	3 yrs. to 20 yrs.
Group II	20 yrs. to 40 yrs.
Group III	40 yrs. to 60 yrs.
Group IV	60 yrs. to 80 yrs.

All patients were treated once in twenty-four hours. Total dosages were recorded for each period of treatment. On the first day, 60 to 100 units, depending on the severity of the symptoms, were administered. On the second and third days, 60 to 80 units were administered. On the fourth and subsequent two or three days, 20 to 60 units were administered, depending entirely on the individual response to this schedule of dosage. Daily treatment was given to the majority of the patients for from five to seven days.

In the first group there were seven patients, all males. Ages were from three years to twenty years. The child of three years is especially interesting as the hormone ACTH undoubtedly saved this child's life.

Age Group I (3–20 Years)

Case 2.—D.B., a three-year-old child, has had asthma since the age of three months. When first seen he was extremely ill, and was immediately started on ACTH in oil. He was given a total of 300 mgms. with complete relief. Skin tests by Passive Transfer Technique showed a number of reactions to inhalants, peanut butter and ragweed pollen. ***Frequent ingestion of peanut butter was the principal cause of his asthma.*** The patient is now under specific treatment with extracts of ragweed and house dust. Since the

initial course of treatment with repository ACTH, he has had no further asthmatic discomfort except one spell, lasting a few days in June, 1951; cause undetermined.

These seven patients responded to H.P. Acthar Gel without local reaction; there were no side effects excepting as mentioned in Case 2; the clinical improvement of each patient was rapid and prolonged.

In the second group there were sixteen patients, ages twenty to forty years, average age thirty-three years. Seven patients whose symptoms occurred as acute paroxysms, failed to obtain relief until after the administration of H.P. Acthar Gel. The other nine patients had been completely incapacitated for days prior to the administration of the hormone. Allergy was the primary cause of the attacks in thirteen patients; infection precipitated the respiratory symptoms in three patients; however, in four patients of the allergic group, infection, though secondary, was an important factor. Although the majority of these patients had acute paroxysms of asthma, complete relief followed the treatment in all but five patients.

It is to age groups III (40–60 years) and IV (60–80 years) that special attention is directed, as these patients are the serious clinical problems encountered every day by the internist. The primary problem is infection; the secondary problem, the aftermath of prolonged dyspnea, is emphysema. Allergy is of little importance in the majority of the cases. For example, allergy played a minor role in only six of the fifty-two patients in the two age groups.

Twenty-six patients received their treatment without any side reactions; three patients complained of insomnia, superficial edema, and increase in weight, but a more cautious treatment was subsequently administered without any recurrence. Three patients of the twenty-nine who responded poorly to adequate doses of Cortone prior to Corticotropin therapy are still receiving injections of H.P. Acthar Gel 20 to 60 units every second or third day. Of the twenty-nine patients, only one patient responded poorly to the hormone. To this patient 440 units gave such transient benefit that further treatment was inadvisable. Subsequently, fifteen of the twenty-nine patients were given Cortone or Hydrocortone orally. With no exceptions, they are continuing in a remission.

Age Group III (40–60 Years)

Case 5.—H.F., a forty-three year old man, has had asthma for over twenty years; attacks associated with infection. He was hospitalized by his local physician and given 1,300 mg. of Cortone during a period of two weeks. His relief from this hormone lasted three days; he was readmitted by his physician and was given 2,000 mg. of Cortone, again with transient relief. Subsequently, he was referred to the Johns Hopkins Hospital. Because of the severity of his asthmatic attack he was immediately admitted. His vital capacity was 2.5 liters, fifty per cent of normal. He was given a daily dose of H.P. Acthar Gel and a total of 560 units in sixteen days. On discharge, his vital capacity had attained 4.2 liters and his asthmatic attack had cleared completely. Since his original course of the hormone, he has experienced three relapses, each one responding to H. P. Acthar Gel. The last relapse occurred eleven months ago.

The last age group, sixty to eighty years, is the most interesting of the four groups. Every known therapeutic measure had been used, and had finally failed to relieve these aged patients now completely incapacitated by emphysema and asthmatic bronchitis. Then H.P. Acthar Gel was administered. There were twenty-six patients—twelve female; fourteen male—with an average age of seventy-three years. The oldest patient was seventy-eight years; the youngest sixty-one years. In every case the symptoms were most disturbing, with dyspnea of such severity that a diagnosis of status asthmaticus was tenable in a number of the acute attacks that occurred intermittently.

The duration of symptoms was as follows: Seven patients had become progressively more uncomfortable during a period of thirty or more years; nine patients during ten or more years; and ten patients during one or more years. With

one exception, infection was the primary etiologic factor; the exception, age seventy-five, had suffered with pollen hay fever for many years and had gradually developed seasonal bronchial asthma and emphysema in spite of specific desensitization with ragweed pollen extract.

Treatment was administered without any side effects; the results were excellent in twenty-four patients; poor in two. These twenty-four patients progressed from chronic invalidism to comparatively comfortable health and well-being. Ten patients, now entirely free of discomfort, are on maintenance doses of Hydrocortone, 10 to 20 mgms twice daily. Of the group of twenty-six patients, seven who derived no relief from Cortone, are taking daily or three times weekly, or twice weekly, 40 to 80 units of H. P. Acthar Gel administered on schedule just as one might administer insulin to the diabetic patient. Relapses occurred repeatedly in seventeen patients. Of these seventeen, one patient, age sixty-eight, who had repeated attacks of status asthmaticus, required nine courses of the hormone—a total of 2,600 units—to secure complete freedom from symptoms. Neither Cortone nor Hydrocortone could be tolerated because of the rapid development of edema and depression. At the present time she is in her longest remission.

The clinical history and course of one of these patients is most instructive:

Age Group IV (60–80 Years)

Case 19.—W.W., a sixty-four year old man, has had asthma for fifty-four years. His attacks are related to infection, and there is also the complication of emphysema. When first seen, he had been practically incapacitated for ten years. He was hospitalized September 1950, and given a course of crystalline ACTH. There was gradual and impressive improvement, both in physical signs and in exercise tolerance. He recovered to the degree that he was able to take respiratory exercises for the emphysematous problem, and upon discharge was quite comfortable. He remained free of discomfort for one year, then he contracted a cold and once again had severe asthma. This was controlled readily with a course of H.P. Acthar Gel. Since then he has been given short courses at intervals, each time with equally beneficial effect.

Except for relatively minor attacks during upper respiratory infection, this man had had continued remission for more than three years.

In spite of numerous complications, hypertension, diabetes, emphysema, coronary occlusion, chronic sinusitis and frequent contraindications, treatment has been continued with cautious observation and has effected astounding relief and resulting well-being. In no instance was a complication aggravated. Instead, the relief of dyspnea, in all probability, prolonged rather than shortened the life of the patients. H.P. Acthar Gel should be used as a means to control these distressing symptoms just as insulin is used as a means to control the diabetic syndrome. Cautious administration and accurate dose determination are prerequisites before insulin is prescribed. The same considerations must be given to continued use of H.P. Acthar Gel.

In conclusion, the excellent results obtained from H.P. Acthar Gel; the ease of administration; the economy for the chronically ill ambulatory patient warrant the opinion that a drug of great value is available to the careful physician. The relapses that occurred in the asthmatic group of patients were relatively mild and easily controllable, irrespective of the previous dosage. Experience suggests that the disease does not become resistant to the hormone after repeated administration. Sensitization has not been encountered, but with accumulation of additional patients, it may be. More serious complications following hormone therapy in any chronic disease must be anticipated constantly. Certainly, in this group of patients the severity of the disease warranted each risk.

1114 St. Paul Street
Baltimore 2, Maryland

DR. HARVEY: The next speaker is Dr. Raymond C. V. Robinson.

DERMATOLOGY

RAYMOND C. V. ROBINSON, M.D.[1]

The early observations of O'Leary and his associates (1, 2, 3, 4, 5) regarding the effects of systemically administered cortisone and corticotropin on various dermatoses have stimulated other investigators to record their results (6, 7, 8, 9, 10). More recently Sulzberger's group (11, 12), we (13, 14) and others (15, 16) have studied the effects of topical application of hydrocortisone. Although early enthusiasm is already waning, there is still considerable indiscriminate use of all forms of these drugs and a review of our current knowledge and clinical impressions seems indicated.

The imperfectly understood pharmacologic action and numerous undesirable side effects attendant to prolonged administration should in themselves lend to caution. It should be unnecessary to remind the physician that careful laboratory control of electrolyte balance must be maintained. Probably the single most important fact to keep in mind is that neither cortisone nor corticotropin has been shown to be capable of *curing* any dermatologic entity, but merely of minimizing symptoms. The patient must be made to understand this, because the mental depression following exacerbation, when administration of the drug is stopped, may be severe.

Cortisone and ACTH cause certain undesirable side effects, both on the skin and systemically.

The more common cutaneous reactions include acneform eruptions, increased pigmentation, seborrheic dermatitis, hirsutism or alopecia and increased susceptibility to infection. Systemically, Cushing's syndrome, euphoria, depression, frank psychoses, convulsions, personality changes, edema and transient hyperglycemia have been noted. Known contraindications to their use include tuberculosis, peptic ulcer, bacterial infections, thrombophlebitis, heart failure and renal insufficiency.

[1] Instructor in Medicine and Instructor in Dermatology, The Johns Hopkins University School of Medicine; Assistant Professor of Dermatology, University of Maryland.

Systemically Administered ACTH and Cortisone

The primary indication for the systemic administration of cortisone or corticotropin is in the treatment of conditions with fatal outcomes, with the hope of relieving symptoms and possibly prolonging life expectancy. Two dermatologic entities fall into this category and, in both, the drugs have proven useful. These are pemphigus and systemic lupus erythematosus.

O'Leary (5) states that pemphigus vulgaris responds more satisfactorily than pemphigus vegetans or pemphigus foliaceous. Patients usually respond to 200 mg. cortisone or 50 mg. corticotropin daily, although larger doses may be necessary. Frequently, after remission has been accomplished, this status can be maintained by 50 to 100 mg. cortisone given orally each day. The occasional patient will proceed steadily downhill to fatal termination in spite of massive doses. The generally good results, however, are gratifying, since pemphigus vulgaris was hitherto invariably rapidly fatal.

The responsibility for the management of systemic lupus erythematosus is being assumed more and more by the internist. However, the dermatologist continues to include this serious disease in his field because of the cutaneous manifestations and the frequency with which he is called on to corroborate the diagnosis. Moore's (17) studies indicate that the condition may have a more widespread incidence than previously believed, and theorizes that it may not be invariably fatal.

Haserick (18) feels that cortisone and ACTH increase the life expectancy of patients suffering from systemic lupus erythematosus. In a series of ten patients who did not receive steroid therapy, only one survived five years. Of seventy

patients whose diagnosis was corroborated by the finding of the L.E. cell and who were treated, 58 were still living one to four years later. In some of these, steroid therapy could be discontinued without exacerbations.

Follow-up in none of these cases is sufficient to prognosticate long term results, but, in O'Leary's patients, the remissions have usually been of short duration and the patients have eventually died of the disease. As with pemphigus, the major effect is one of amelioration of symptoms.

While in pemphigus vulgaris, diagnosis of the condition is sufficient reason to start steroid therapy, this does not obtain in the treatment of systemic lupus where the patient may not appear seriously ill but is found to exhibit the L.E. phenomenon. The decision as to whether therapy should be started immediately or delayed to the onset of serious symptoms is not one to be made lightly. In view of the possible serious side effects, the absence of curative qualities of the drug, the dangers attendant to rapid withdrawal and not infrequent failures of second courses, I would favor delay of therapy until symptoms develop.

The drugs are worthless in discoid lupus.

One of the most common of the chronic dermatoses is psoriasis, with or without arthropathy. Cortisone and ACTH received early and exhaustive trials in the treatment of this disease whose etiology remains obscure. Arthritis will go into a state of remission but the results in psoriasis are peculiar, in that frequently the condition will spread rapidly and may become universal during the course of treatment.

Occasionally the patient with generalized exfoliative dermatitis will respond to a course of corticotropin, but when the relapse occurs, a second course may be of no benefit.

The results in chronic eczemas are disappointing. The occasional patient who is relieved of symptoms does not justify the indiscriminate use of these drugs.

The early results in the treatment of scleroderma seemed promising but we now feel much less enthusiastic. Further, the drugs seem contraindicated in acrosclerosis where they apparently predispose to severe hypertension and renal disease, with subsequent cerebrovascular accident.

Lymphoblastomas do not respond uniformly. Treatment of sarcoid, lichen planus and dermatomyositis are unsatisfactory.

Tuberculosis of the skin and tuberculids, at present, interdict the use of steroids.

Cortisone and ACTH may have a place in the therapy of another group of dermatoses when used properly. These conditions are limited to acute, severe sensitization reactions such as dermatitis venenata, urticaria, penicillin reactions, erythema multiforme and drug reactions.

It should be remembered that dermatitis venenata of the rhus variety is a self-limited condition, and while symptoms may be severe for a few days, they are usually easily controlled by more conservative means. The steroid hormones will shorten the course of the disease and relieve the symptoms. If used, the dose is 200 mg. or less of cortisone by mouth or 25 mg. of ACTH intravenously given daily for two or three days. Similar dosage may be used successfully in erythema multiforme (results are not uniform, however) and other self-limited conditions. In the few cases of penicillin reaction where I have seen it used, symptoms are controlled only as long as the drug is given, probably because of the length of time required for the body to eliminate all traces of procaine penicillin.

Dillaha and Rothman (19) claimed that cortisone and ACTH were capable of re-growing hair. Most of us feel that while the hair does regrow in alopecia areata, it will not stay and may fall out even while the drug is being given.

Local Use of Hydrocortisone

Both cortisone and ACTH have proven valueless when applied locally. However, hydro-

cortisone, as the free alcohol or acetate, has been shown to be useful in some dermatoses.

At the present time, there are at least six preparations commercially available and several others are awaiting approval. Proper selection of concentration and base are important and this warrants some discussion.

We have found, in a study of more than 300 patients, that the greasy bases spread more readily, covering larger areas, and are therefore more economical to the patient. Further, they seem to cause fewer adverse reactions than when hydrocortisone is incorporated in a vanishing cream base. The 2.5% ointment has been more effective than the 1.0%, particularly when mixed in a greasy base. One company has used only petrolatum and this preparation is satisfactory. Introduction of lanolin serves to increase sensitizing properties and is undesirable. For the physician who wants a liquid application, a lotion is available.

Local hydrocortisone is useful in the treatment of localized eczemas, pruritus ani and pruritus vulvae and contact dermatitis but is of no value in psoriasis, lichen planus, alopecia areata or most other conditions in which it has been tried.

Summary

Systemic administration of cortisone and ACTH is useful in relieving the symptoms of pemphigus and systemic lupus erythematosus and may prolong life, but do not cure these conditions.

In short courses they are useful in controlling acute dermatoses such as dermatitis venenata, urticaria and erythema multiforme.

In the vast majority of dermatologic conditions, therapy with these drugs has no value or a more effective, more conservative treatment is available.

Local use of hydrocortisone is of limited value in relieving symptoms of eczema, contact dermatitis and pruritus ani or pruritus vulvae.

Conclusion

Where therapy with these drugs is considered, anticipated results must be weighed against possible undesirable or serious side effects.

1004 North Calvert Street
Baltimore 2, Maryland

Bibliography

1. Brunsting, L. A.; Slocumb, C. H., and Didcoct, J. W.: Effects of Cortisone on Acute Disseminated Lupus Erythematosus, A. M. A. Arch. Dermat. & Syph. **63:** 29, 1951.
2. Kierland, R. R.; O'Leary, P. A.; Brunsting, L. A., and Didcoct, J. W.: Cortisone and Corticotropin (ACTH) in Dermatology, J. A. M. A. **148:** 23, 1952.
3. O'Leary, P. A.: Symposium in Dermatology: Cortisone and Corticotropin in the Treatment of Cutaneous Diseases, Postgrad. Med. **12:** 10, 1952.
4. Brunsting, L. A.; Slocumb, C. H., and Didcoct: Effects of Cortisone on Acute Disseminated Lupus Erythematosus, A. M. A. Arch. Dermat. & Syph. **63:** 29, 1951.
5. O'Leary, P. A. and Erickson, J. G.: Use and Abuse of Cortisone and Corticotropin (ACTH) in Dermatology, J. A. M. A. **152:** 1695, 1953.
6. Plotz, M.; Blunt, J. W., and Ragan, C.: Effect of Pituitary Adreno-Corticotrophic Hormone (ACTH) on Disseminated Lupus Erythematosus, Arch. Dermat. and Syph. **61:** 913, 1950.
7. Soffer, L. J.; Levitt, M. F., and Boehr, G.: Use of Cortisone and Adrenocorticotrophic Hormone in Acute Disseminated Lupus Erythematosus, Arch. Int. Med. **86:** 858, 1950.
8. Behrman, H. T., and Goodman, J. J.: Skin Complications of Cortisone and ACTH Therapy, J. A. M. A. **144:** 1950.
9. Frazier, C. N.; Lever, W. F. and Keuper, C. S.: Response of Patients with Malignant and Benign Pemphigus to Adrenocorticotrophic Hormone and Cortisone, Am. J. M. Sc. **222:** 308, 1951.
10. Cannon, A. B.; Hopkins, J. G.; Andrews, G. C.; Colfer, H. F.; Gross, P.; Nelson, C. T., and Howell, C. M., Jr.: Pituitary Adrenocorticotrophic Hormone (ACTH) and Cortisone in Diseases of Skin: Pemphigus Vulgaris, and other Bullous Dermatoses, J. A. M. A. **145:** 201, 1951.
11. Sulzberger, M. G. and Witten, V. H.: Effect of Topically Applied Compound F in Selected Dermatoses, J. Invest. Dermat. **19:** 101, 1952.
12. Sulzberger, M. B.; Witten, V. H. and Smith, C. C.: Hydrocortisone (Compound F) Acetate ointment in Dermatology Therapy, J. A. M. A. **151:** 468, 1953.
13. Robinson, R. C. V.: Local Use of Hydrocortisone Acetate. A Preliminary Report, Bull. Johns Hopkins Hospital, **93:** 147, 1953.
14. Robinson, H. M., Jr. and Robinson, R. C. V.: Local Use of Hydrocortisone, J. A. M. A. in press.

15. Alexander, R. M. and Manheim, S. D.: The Effect of Hydrocortisone Acetate Ointment on Pruritus Ani, J. Invest. Dermat. **21:** 223, 1953.
16. Rein, C. R.: The Present Status of Hydrocortisone Acetate Ointment in Dermatologic Therapy, A. M. A. Arch. Dermat. & Syph. **68:** 452, 1953.
17. Moore, J. E. and Mohr, C. F.: The Incidence and Etiologic Background of Chronic Biologic False Positive Reactions in Serologic Tests for Syphilis, Ann. Int. Med. **37:** 1156, 1952.
18. Haserick, J. R.: Effect of Cortisone and Corticotropin in Prognosis of Systemic Lupus Erythematosus, A. M. A. Arch. Dermat. & Syph. **68:** 714, 1953.
19. Dillaha, C. J. and Rothman, S.: Therapeutic Experiments in Alopecia Areata with orally Administered Cortisone, J. A. M. A. **150:** 546, 1952.

Dr. Harvey: I think in view of the fact that the hour was so late for the starting of this panel, we will not hold everyone here for a question period. The speakers will remain at the platform, however, and if any of you would care to come up and ask questions, they will try their best to answer them.

MEDICINE'S CONTRIBUTION TO WORLD PEACE

Medicine is recognized as one of the great world-wide arts and sciences that bind humanity together with a language and a purpose transcending all differences of race, creed or color.

To make the language of medicine more articulate in the cause of international peace and human progress, the doctors of the free world are united in the World Medical Association, whose membership now embraces 53 national medical associations.

But it is never enough to establish great institutions. Only when *individuals* are given an opportunity to play an active part does any human organization "come alive" and begin to realize its basic purposes.

Every American doctor knows first-hand the vital role he may play in guiding and protecting his profession by becoming an active member of his county, state and national medical societies.

Today, every American doctor has the opportunity—and the imperative challenge—to help make our profession a stronger influence for world peace. This he may do by joining our own United States Committee of the World Medical Association.

In a timely action, W.M.A., at its 10th General Assembly in Havana in October, adopted a six point program to implement one of its constitutional purposes: to promote world peace. This program includes the development of mutual exchange visits of foreign doctors; exchanges of distinguished medical teachers; establishment by each W.M.A. member national association of an "international visitor's bureau"; stimulation of visits by representatives of member associations to the annual meetings of other member associations; holiday exchange programs between doctors and their families; and exchanges of text books and medical and scientific publications.

To implement this program takes money, and interested members. You may play your part by joining the U. S. Committee of the World Medical Association. Active membership dues for 1957 are $10.00. To join the U. S. Committee—and to learn how you can contribute to this great cause—communicate with Dr. Amos R. Koontz, 1014 St. Paul Street, Baltimore, Maryland.

ARTICLE OF INTEREST

DR. FREDERIC V. BEITLER: FIFTY YEARS AN M.D.

FIRMADGE KING NICHOLS, M.D.

Fifty years ago "Fred" Beitler, a native of Baltimore, graduated from the old Baltimore Medical College. After passing his licensing examination to practice his profession, he started out on a career which has left its mark on the health of Maryland. This cannot be illustrated by statistics. To be sure, at the time of graduation it was evident that he was destined to make a mark in his chosen profession, since his diploma was marked "Magna cum Laude." He also collected the medal for scholarship and several other awards. After graduation, he went to West Virginia for several months, and then returned to Baltimore. He became associated with the Baltimore City Health Department as Assistant Bacteriologist. He decided to live in Halethorpe, and again showed his astuteness by marrying Daisy Carson, a Halethorpe girl.

At that time typhoid fever was rampant in Maryland, and locally we had an epidemic each year. We had almost lost the Spanish American War due to typhoid. General Gorgas was trying desperately to rid Panama of typhoid, yellow fever and malaria, so that we could build the canal. The Spanish American War had taught us that certain diseases were carried by insects and specifically that typhoid could be spread by flies. At that time the care of milk was practically non-existent and various unsanitary customs, which would now be looked upon with horror, were accepted as routine. Each year there were hundreds of cases of typhoid fever, with a mortality of approximately ten per cent; in addition to the extremely high mortality, many patients took a year or longer to recover.

General Gorgas and Major Walter Reed had started the idea of vaccines. However, in general this idea was not looked upon with favor. Fred Beitler developed an intense interest in typhoid prevention and became an evangelist for the use of typhoid vaccine. In 1910 this narrator came into the picture when, as Resident in Medicine at St. Agnes Hospital, he came in contact with Fred Beitler and became sold on the idea of vaccines. The vaccine at that time was crude. It was made at the Health Department and always gave the recipient a very sore arm, in addition to about three days in bed with all the symptoms of an advanced case of typhoid fever. I can still remember being in bed for a week.

Dr. Beitler himself had a most unpleasant

experience. He had been inoculated at the Health Department and on his way home stopped in St. Agnes Hospital, where he was given a message that the vaccine he had taken contained live bacteria. He conferred with me and I excised the area of vaccination en bloc, without the aid of a local anaesthetic. We were afraid to use a needle in the area because of the possibility of spreading the infection. Nothing happened except a scar on Dr. Beitler's arm and a rather painful experience.

Through the work of such men as Dr. Frederic V. Beitler we had very little trouble with typhoid fever among the troops in World War I and it was practically unheard of in World War II. In this era we do not have enough patients with typhoid fever to demonstrate to students in medical schools.

For many years Dr. Beitler acted as legislative representative for the Medical and Chirurgical Faculty when the Maryland legislature met in Annapolis. Many of the laws protecting the practitioners of medicine were passed through his influence. In addition, he helped to defeat legislation that threatened to be detrimental to the medical profession. Subsequently the writer succeeded him as legislative representative. The experience helped me wonderfully in learning the ways of politicians and sophisticated men of the world.

In 1928 Dr. Beitler took a course in oto-laryngology with Chevalier Jackson in Philadelphia and subsequently became a diplomate of the American Board of Oto-laryngology.

4711 Roland Avenue
Baltimore 18, Maryland

CLINICO-PATHOLOGICAL CONFERENCE

Clinical Center, National Institutes of Health, Bethesda, Maryland
Thursday Evening, 8:30 P.M., February 7, 1957

Subject: Progressive Rheumatoid Arthritis Complicated by Polyarteritis Nodosa
Moderator: JOSEPH J. BUNIM, M.D., Clinical Director, National Institute of Arthritis and Metabolic Diseases
Clinical Presentation: ROGER L. BLACK, M.D., NIAMD
Guest Discussant: CHARLES RAGAN, M.D., Associate Professor of Clinical Medicine, College of Physicians and Surgeons, Columbia University, New York
Presentation of Necropsy Findings: RICHARD L. SWARM, M.D., National Cancer Institute
Discussed by: LEON SOKOLOFF, M.D., NIAMD, Role of Allergy in Experimental Polyarteritis Nodosa (Presentation of Original Work)
FREDERICK G. GERMUTH, JR., M.D., Associate Professor of Pathology, Johns Hopkins University School of Medicine, Baltimore, Maryland

Interested Physicians Are Cordially Invited

Report

COMMITTEE FOR THE STUDY OF PELVIC CANCER*

BEVERLEY C. COMPTON, M.D., *Secretary*

The Committee for the Study of Pelvic Cancer was established in the fall of 1951 under the auspices of the Medical and Chirurgical Faculty and the Maryland Division of the American Cancer Society, to make a study of the delay periods in the diagnosis and treatment of pelvic malignancy, and to attempt to reduce these delay periods. Fifteen hospitals in Baltimore City have cooperated in this study. Through December 31, 1955, a total of eleven hundred and twenty-four cases under treatment in these hospitals had been reviewed from the standpoint of delay. The Committee has considered a lapse of time of more than a month from the onset of symptoms to the time of diagnosis and treatment as "delay."

TABLE I

Cervical Carcinoma—817 Cases

Stage	0	I	II	III	IV	Unclassified*	Total
No Delay							
Cases	131	86	38	24	1	17	297
Per cent	44	29	12.7	8	.3	6	
Delay							
Patient delay	19	84	114	91	15	35	358
Physician, institutional and combined delay	5	45	41	48	13	10	162
Total	24	129	155	139	28	45	
Per cent	4.6	24.8	29.8	26.7	5.4	8.7	
Total Cases							817

* or treated elsewhere.

* Under the auspices of the Medical and Chirurgical Faculty and the Maryland Division of the American Cancer Society.

TABLE II

Relationship between Delay Period and Stage of the Disease in Cervical Carcinoma—520 cases

	Stage					Unclassified*	Total (cases)
	0	I	II	III	IV		
Delay Period							
1+–3 months	17	60	43	25	4	13	162
4–6 months	1	39	50	40	8	9	147
7–9 months		8	20	23	3	7	61
10–12 months		6	18	29	8		61
over 12 months	1		8	15	2	1	27
Unclassified as to time	5	16	16	7	3	15	62
Total	24	129	155	139	28	45	520

* or treated elsewhere.

In the review of these cases certain information has been accumulated concerning the relationship between the delay period and the stage of the disease at the time the patient comes to diagnosis. The findings have been of particular interest in regard to cervical carcinoma. As of December 31, 1955, a total

TABLE III

Cervical Carcinoma By Stage of Disease—817 Cases

	1951 (3 months)	1952		1953		1954		1955	
	No. Cases	No. Cases	%	No. Cases	%	No. Cases	%	No. Cases	%
Stage 0	2	37	18.0	31	18.1	37	18.7	48	22.3
Stage I	6	48	23.5	37	21.6	54	27.3	70	32.6
Stage II	8	50	24.5	35	20.5	49	24.2	51	23.7
Stage III	6	48	23.5	44	25.7	35	17.7	30	13.9
Stage IV	2	5	2.5	10	5.9	8	4.0	4	1.9
Unclassified or treated elsewhere	5	16	8.0	14	8.2	15	8.1	12	5.6
Total	29	204		171		198		215	

of eight hundred and seventeen cases of carcinoma of the cervix had been investigated. There was no delay, i.e., the diagnosis was established and the patient under treatment within one month, in two hundred and ninety-seven cases or thirty-six per cent. In five hundred and twenty cases, or sixty-four per cent, there was delay on the part of the patient, physician, institution, or a combination of these factors. Tables I and II summarize the findings in regard to delay and the extent of the disease. These findings emphasize the vital importance of early diagnosis in the management of pelvic malignancy.

Other data compiled from the survey reveal a very encouraging number of cases coming to treatment while the disease is still in the early stages. Statistics from other sources have shown the same encouraging trend. The findings of the Committee are summarized in Table III.

The cases reviewed by the Committee have shown also a slight but encouraging lessening of the delay period. In 1955, thirty-nine per cent of the cases included in the study showed no delay and an additional twenty per cent were under treatment within two to three months.

* * * * *

REMINDER REGARDING RESOLUTIONS!

Important Notice for Component Medical Societies and Individual Members of Medical and Chirurgical Faculty

The House of Delegates of the Medical and Chirurgical Faculty approved the following recommendations concerning the procedure to govern the reports which are given at the Annual and Semiannual Meetings:

1. All reports are to be received in the office. Those reports which contain recommendations or resolutions must be in the office eight (8) weeks prior to the Annual or Semiannual Meeting, whichever happens to be concerned.

2. When the reports are received, those containing recommendations or resolutions will be sent to the Component Societies for consideration and so that the Component Delegates may be instructed if desired. These reports will also be referred to Council for discussion at its meeting one or two weeks prior to Annual or Semiannual Meeting.

3. Those reports which contain resolutions are to be referred to the Resolutions Committee for consideration.

4. The Council will refer to the Resolutions Committee any recommendations which it feels should be formulated as resolutions. The Council will also transmit to the Resolutions Committee an opinion of the policy involved in the Resolutions Committee.

5. Reports will be presented to the House of Delegates as usual, and it will be suggested as usual that those reports not containing recommendations or resolutions be accepted as printed and distributed.

6. Those reports containing recommendations or resolutions will be considered and acted upon individually by the House of Delegates.

This policy will be followed in all future meetings.

AS A RESULT OF THIS ACTION OF THE HOUSE OF DELEGATES, RESOLUTIONS FOR PRESENTATION TO THE MAY 1956 MEETING OF THE HOUSE OF DELEGATES, MUST BE IN THE HANDS OF THE SECRETARY, DR. EVERETT S. DIGGS, AT THE FACULTY OFFICE, BY MARCH 6, 1957.

Component Medical Societies

ALLEGANY-GARRETT COUNTY MEDICAL SOCIETY

LESLIE E. DAUGHERTY, M.D.
Journal Representative

Garrett County Physicians Host for Medical Meeting

The September meeting of the Allegany-Garrett County Medical Society was held at the William James Hotel, in Oakland, Maryland, on September 27th.

The speakers for the evening were: Dr. Leo Criep, Professor at the University of Pittsburg, who spoke on Bronchial Asthma and Allergic Bronchitis; and Dr. Edwin Fisher, Associate Professor of Pathology, Veteran's Hospital, Pittsburg, Pennsylvania, who spoke on the Pathology of Allergy.

This meeting was arranged by the Garrett County members of our Society, with recreational activities beginning at the noon hour. The afternoon was spent playing golf, trapshooting and sight seeing through the beautiful lakes and woodland.

Prizes were awarded to the winners of the main events and special prizes to the wives of physicians present.

Frostburg Physician Named to Office

Dr. Martin M. Rothstein, 42 Broadway, Frostburg, Maryland, has been elected Vice-President of the Western Section of the Maryland Academy of General Practice.

Dr. Rothstein is a graduate of Hahnemann Medical College, Philadelphia, Pennsylvania (1939) and engaged in general practice in Frostburg, after serving his internship at McKeesport General Hospital, McKeesport, Pennsylvania. He spent six years as a Captain in the Army Medical Corps and engaged in special work at the Medical Center, Pittsburg, Pennsylvania.

He is unmarried and a native of Philadelphia.

FREDERICK COUNTY MEDICAL SOCIETY

LOUIS R. SCHOOLMAN, M.D.
Journal Representative

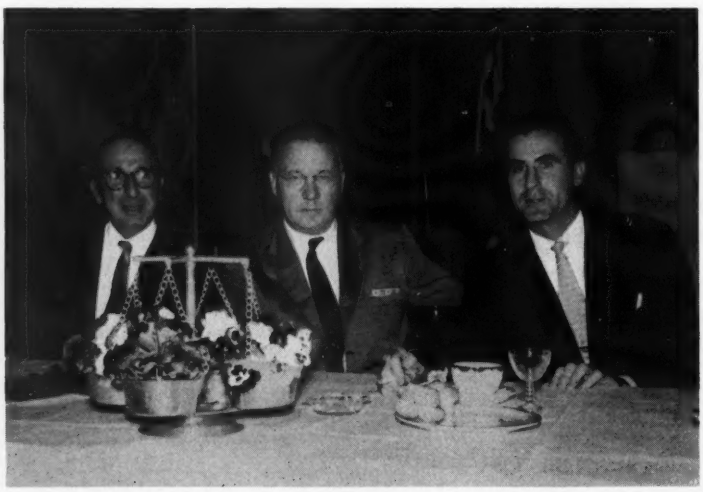
The regular October meeting was held on the 16th at the Francis Scott Key Hotel. The speaker was Mr. Charles A. Rittler of "Blue Shield." His remarks and his answers to queries were quite informative.

Hospital News

The Medical staff met October 1st. Doctors Lea and Chase presented an unusual type of breast carcinoma. Dr. Stone presented a case of lymphatic leukemia which "complicated" a case of severe herpes zoster.

The Medical Department met October 26th. Dr. R. S. Turner discussed the "Evaluation of Kidney Function Tests."

The presentation at the October C.P.C. was one of severe progressive jaundice which at laparotomy was found to be infectious hepatitis.



Dr. Edwin Fisher, Dr. Wm. A. VanOrmer, *Pres.*, Allegany-Garrett Co. Medical Society and Dr. Leo Criep

Necrology*

Edgar Allan Jones, M.D.
1872–1956

Dr. Edgar Allan Jones died at his home on Oakley Street, Cambridge, Maryland, on May 27, 1956. Funeral services were held from Christ Church with interment in the Christ Church cemetery of Cambridge.

Dr. Jones was born in Caroline County on June 17, 1872, the son of Dr. Elias and Mary Nichols Jones. His father was the author of Jones' "History of Dorchester County."

His early education was obtained in the public schools of Dorchester County, and he was graduated from the Cambridge High School while the former Gov. Emerson C. Harrington was principal of that school.

Dr. Jones taught school at Bishop's Head, in lower Dorchester, before going to Baltimore City College and the Baltimore Medical College from which he was graduated at the age of 21.

He began the general practice of medicine at Crapo, in Dorchester County. In 1907 Dr. Jones went to Towson and took post-graduate work at Johns Hopkins University. He worked in the private clinical laboratory of Dr. Charles E. Simons and did special X-ray work with Dr. Christian Deetgen.

Dr. Jones was a member of the State Board of Health from 1912 to 1914. At that time he became the first deputy state health officer. He held the latter post until retiring in 1947. He took an active part in planning and developing a system and plans for the District Health Office laws of 1914.

Dr. Jones was a member of the Medical and Chirurgical Faculty of Maryland, the Dorchester County Medical Society and the American Public Health Association. He was also a charter member of the Dorchester County Tuberculosis Association and was a director of the Maryland Tuberculosis Association. He was a member of the Maryland General Assembly from 1904 to 1908.

In 1905 Dr. Jones married Miss Ann Patterson of Baltimore. He is survived by a son, E. Allan Jones, Jr., of Cambridge, one daughter, Mrs. Avarilla Jones Barrett of Cambridge, and two sisters, Mrs. Robert Keene of Towson and Miss Ruth Jones of Cambridge.

ALFRED R. MARYANOV, M.D.

William Neill, Jr., M.D.
1888–1956

William Neill, Jr., was born April 1, 1888, in Charles Town, West Virginia, the son of Dr. William Neill, beloved physician of Jefferson County. After receiving his preliminary education in the local schools he attended St. Johns College in Annapolis and the Johns Hopkins Medical School, graduating in 1912.

Interested primarily in surgery, he held an internship in the Church Home and Infirmary and succeeded to the residency. In 1915 he joined the staff of the Howard A. Kelly Hospital and continued his surgical career as assistant to Dr. Kelly with particular emphasis on gynecology. He maintained his interest in general surgery and later took over the major share of work of that character as required in that institution. At the same time, under the aegis of Dr. Curtis F. Burnam, he became expert in the then developing field of radium and X-ray therapy and together with Dr. Burnam worked out many of the standard techniques and dosages in that specialty. Succeeding Dr. Kelly and Dr. Burnam, he became chief of the Kelly Clinic in 1947 and so remained until the closure of the clinic in 1953.

In addition to his work at the Kelly Hospital, Dr. Neill continued an active surgical practice at the Church Home and Hospital and at the Hospital for the Women of Maryland and as a consultant in cancer therapy at the Johns Hopkins Hospital. Close relations were maintained between the Kelly Hospital and the Cambridge-Maryland Hospital through the intimate friendship of Dr. Brice Goldsborough and Dr. Kelly; among others of the staff, Dr. Neill traveled at least once a week, and often on emergency calls in addition, to that city and performed a large portion of the surgery for many years. He had a host of patients and lifelong friends on the Eastern Shore. He also made a weekly visit to Martinsburg, West

* Memoir Committee: A. S. Chalfant, M.D., *Chairman*, John F. Hogan, M.D. and Robert H. Riley, M.D.

Virginia, to hold a clinic in surgery and radiation therapy. He contributed a number of articles to various journals on the use of radium in cancer therapy.

He was a member of the Baltimore City Medical Society and the Medical and Chirurgical Faculty of Maryland, the American Medical Association, the Southern Surgical Society, and the American College of Surgeons.

Dr. Neill was married April 7, 1923, to Alice L. Buckler, daughter of Dr. H. Warren Buckler, of Baltimore. His widow survives him and also one son, William Neill III.

Devoted to his work and never too busy to plunge enthusiastically into any surgical or medical problem, he had few outside interests. His vacations consisted largely of visits to his ancestral home in Charles Town, where he was widely known and respected, and every morning delighted in holding a "curb-side clinic" on the parapet of the county courthouse.

After a series of coronary attacks, more or less incapacitating, over a period of years, he succumbed to a cerebral hemorrhage on June 24, 1956.

EDMUND B. KELLY, M.D.

Esther Loring Richards, M.D.
1885–1956

Dr. Esther Loring Richards died at the age of seventy-one on July 6, 1956 at her home in Baltimore. Her church, The Franklin Street Presbyterian, was crowded for the memorial service with friends from every walk of life, for her missionary efforts in behalf of psychiatry had extended to every segment of the Baltimore Community, and her varied interests had made her a member of many formal and informal groups in the city.

Dr. Richards graduated from Mount Holyoke College, took her first year in medicine at the University of Wisconsin, and transferred then to the Johns Hopkins Medical School, from which she was graduated in 1915. She immediately entered the newly established Henry Phipps Psychiatric Clinic as an interne, and remained associated with the Phipps Clinic until her death. She was in charge of the out-patient service of the Clinic from 1920 until her retirement in 1951, and was associate professor of psychiatry in the University from 1923. Her service therefore spanned twenty of the thirty years of Adolf Meyer's regime, and ten years of that of John C. Whitehorn.

She taught a whole generation of medical students, and her forceful, clear, and pungent case presentations emphasizing the practical devices for measuring behavior—"the tests of life"—will not soon be forgotten by those students. She was a prodigious worker, and managed always to extract some fun even from the most arduous effort. She was an excellent speaker, much in demand the country over. She was honored as "Woman of the Year" in science in 1946.

She was the author of two books: Behavior Aspects of Child Conduct (1932), and Introduction to Psychobiology and Psychiatry (1941), besides a full hundred of articles. She held the honorary degree D.Sc. from Mount Holyoke, Wilson, and Goucher Colleges.

She was the trusted consultant for numerous organizations in the city including The Baltimore City Hospitals; various family care organizations; the schools; and, among others, Catholic, Protestant and Jewish charitable organizations. She was on the original Medical Advisory Board of The Seton Institute.

Of Welsh descent, her great love was music, and for long years she was a sponsor of and attendant at The Bach Festival in Bethlehem, Pa. In her last months of semi-invalidism, she was much cheered by the visits of her friend, Mme. Agi Jambor, who played the piano for her.

She had unbelievable courage in the face of the long illness which she knew would bring death, and she carried on an extensive practice from her wheel chair until the last two weeks.

Burial was in South Yarmouth, Massachusetts.

RUTH E. FAIRBANK, M.D.
WENDELL MUNCIE, M.D.

Charles Thompson Fisher
1879–1956

Dr. Charles Thompson Fisher, practicing physician of Wicomico and Somerset Counties for 55 years, died on September 19, 1956, at the Peninsula General Hospital in Salisbury after a long illness.

He was born August 7, 1879, in Princess Anne, Maryland, and graduated from the University of Maryland Medical School in 1901. After two and a half years of internship, of which part of one year was

spent at the University of Munich, he returned to Princess Anne where he practiced for eighteen years. These were the years of the horse and buggy and he often recalled how he exhausted all four of his horses in a single day while making calls in the area.

In 1918, Dr. Fisher went to Baltimore to work with Dr. Thomas Cullen and Dr. Howard Kelly in an effort to further pursue his quest of knowledge to help him in the better treatment of his patients. After one year, he was appointed superintendent of the Maryland General Hospital in that city.

In 1920, he married the former Miss Ellen McMaster of Princess Anne and, in that same year, settled in Salisbury where he remained in active practice of medicine and surgery until a few months before his death.

Dr. Fisher was a member of the American College of Surgeons, the Medical and Chirurgical Faculty of Maryland, and the Wicomico County Medical Society. He was also a Mason and retained his membership in the lodge in his home town of Princess Anne.

Dr. Fisher is survived, in addition to his wife, by a brother, Dr. W. Henry Fisher of Centerville, Maryland; a nephew, Dr. William H. Fisher, Jr., of Salisbury, Maryland; and a niece, Mrs. David S. Gillmor of Long Island, New York.

WILLIAM H. FISHER, JR., M.D.

Charles Henry Conley
1876–1956

Dr. Charles Henry Conley, aged 79, died of myocardial infarction at his home, Guilford, just outside of Frederick, March 20, 1956. He was born at Silver Spring, Montgomery County, April 7, 1876. He received his early education in private schools, including the Episcopal High School near Alexandria, Virginia. He then attended the Maryland Agricultural College and later began the study of medicine at the University of Virginia and completed his course at the Baltimore Medical College. He received his M.D. degree in 1898.

After two years as a house physician he began practice in Adamstown, eight miles south of Frederick. He moved his office to Frederick where he was one of the founders of the Professional Building. His private practice was interrupted by service in the Medical Corps of the Army during World War I. He entered as a Captain and was discharged as a Major.

He gained state wide fame in 1934 when he entered the Democratic gubernatorial primary against Governor Albert C. Ritchie, who was seeking a fifth consecutive term. Waging an active campaign, he carried the entire Eastern Shore and two Western counties. The race ended with 135,000 for Governor Ritchie and 90,000 for Dr. Conley. In the ensuing election the Republican, Harry Nice, became Governor. Dr. Conley never sought public office thereafter, but remained active in the Democratic party.

Aside from his profession, his farm, and politics his great interest was in the Frederick County Agricultural Society ("The Fair"). He was president for several terms and on the board of managers for many years.

For many years Dr. Conley was a member of the board of managers of the State Tuberculosis Sanatorium at Sabillasville and had been its president. He was a director of the Eudowood Tuberculosis Sanatorium in Towson. He was a past president of the Frederick County Medical Society.

Dr. Conley was also active in banking and a senior member of the Board of the old Citizens National Bank. He was elected a director of the Farmers and Mechanics-Citizens National Bank. He was an ardent sportsman and was particulary interested in hunting and fishing.

Dr. Conley was married to Miss Helen Abell Baughman, daughter of the late General and Mrs. Victor H. Baughman, who survives with five daughters and one son, Dr. Charles H. Conley, Jr. who is practicing in Frederick.

Dr. Conley was in active practice until 1951 when he suffered his first myocardial infarction at the age of 75. Thereafter, he attended his office several times a week. As a general practitioner and an active farmer he was well liked throughout the county.

The profession has lost an able member and the county a leading citizen.

LOUIS R. SCHOOLMAN, M.D.

Charles Arlington Horine
1862–1956

Dr. Charles A. Horine, aged 93, died of femoral artery embolism at the Frederick Memorial Hospi-

tal, March 15, 1956. He was born at Burkittsville, Md., August 30, 1862. He was educated in the public schools and worked on his father's farm until 1885. He entered the Philadelphia College of Pharmacy from which he graduated in 1887. After spending the summer clerking in a drug house he enrolled in the Jefferson Medical College. He received his M.D. degree in 1890 and immediately returned to Frederick County.

Dr. Horine engaged in general practice and opened a drugstore in Brunswick at the turn of the century. In a short while he was firmly established. In 1902 he took on the additional duties of Health Officer and later B. & O. Surgeon. He extended his activities on being elected Mayor in 1906. He served three consecutive terms, finally retiring from public life in 1912.

He married and had four children, one of whom, Dr. Grove Horine, is now practicing in Philadelphia. In 1908 he built a three story house on a corner lot in downtown Brunswick. The first floor was occupied by the most modern pharmacy in Frederick County and his office. The two upper floors were his living quarters.

Dr. Horine was an inveterate whistler. A patient could tell he had arrived at the house by his whistle, which had an immediate therapeutic effect.

Dr. Horine continued in the practice of medicine and pharmacy until his last illness. With him passed perhaps the last of the pharmacist-physicians who were not unusual fifty years ago.

LOUIS R. SCHOOLMAN, M.D.

Frank L. Vanni, M.D.
1917–1956

It is with deep regret that we must accept the passing of Dr. Frank L. Vanni. Dr. Vanni was a surgeon, a gentleman and an earnest friend to all who knew him and to every patient who sought his help.

Born in Baltimore in 1917, Dr. Vanni attended the public elementary schools and the Forest Park High School. A graduate of Loyola College, Baltimore and the Flower Medical College of New York, Dr. Vanni received his surgical training at the St. Joseph's Hospital in Baltimore. After serving during World War II as a major in the Medical Corps of the United States Army, he returned to Baltimore to enter into private practice. Aside from his professional society memberships, Dr. Vanni also served as Chairman of the Scholarship Committee of the Apian Society.

The sincere pleasure which Dr. Frank Vanni derived from serving his family, his patients and his friends imparted to him a deep warmth which will long be remembered by those of us fortunate enough to have known him. Surviving him are his widow, six children, parents and sister.

OTTO C. PHILLIPS, M.D.

MEDICAL NEWS

Cardiac Surgical Program: National Jewish Hospital at Denver, a free, non-sectarian institution, is expanding its facilities for cardiovascular patients with lesions amenable to surgical intervention. Only patients unable to pay for private care are eligible for admission. Since the hospital has a complete cardio-pulmonary physiology laboratory, definitive diagnosis by the referring physician is not necessary. Inquiries concerning admission should be directed to Miss Grace Grossman, Director of Social Service and Rehabilitation, National Jewish Hospital, 3800 East Colfax Avenue, Denver 6, Colorado.

Library

"Books shall be thy companions; bookcases and shelves, thy pleasure-nooks and gardens." *ibn Tibbon*

LIBRARY CHATTER

In preparing an exhibit for the Library of some of our books on early Naval Medicine, our attention was focused on the following quotation in Thomas Trotter's Medicina Nautica, London 1799:

"We wish to call the attention of medical gentlemen in the Navy . . . to the establishment of a Public Library, for books on medicine, and its collateral sciences. . . . The necessary books which every physician and surgeon must peruse, in order that his knowledge may keep pace with the improvements of his profession, are not only numerous, but expensive; a great part of them are beyond the reach of an individual."

Could the worthy gentleman but see a part of the present yearly periodical and monographic output of medicine and the collateral sciences, he would be sorely perplexed, not only as to where it should be housed but also as to what was the chaff and what was the wheat.

It is this winnowing process that your Library Committee does for you. Being human, they may make errors, or their judgement may not be yours; therefore they rely upon you to supplement their choice by your own special knowledge or need. The books listed below are a few of those we have recently ordered:

Adriani, John, Techniques and procedures of anesthesia. 2d ed., Springfield, C. C. Thomas, 1956.

Alexander, Franz, Psychoanalysis and psychotherapy; developments in theory, technique and training. New York, Norton, 1956.

Barach, Alvan L., and Bickerman, Hylan A., Pulmonary emphysema Baltimore, Williams and Wilkins, 1956.

Bland, J. H., Clinical recognition and management of body fluids. 2d ed., Philadelphia, Saunders, 1956.

Brooks, Chandler McC., Excitability of the heart. New York, Grune, 1955.

Cantor, Alfred J. ed., Psychosomatic aspects of surgery. New York, Grune, 1954.

Crowe, Schull, and Neel, Multiple neuro-fibromatosis. Springfield, Thomas, 1956.

Delp, Mahlon H., Physical diagnosis. Philadelphia, Saunders, 1956.

Everett, H. S., Gynecological and obstetrical urology. 2d ed., Baltimore, Williams and Wilkins, 1947.

Fields, Guillemin, and Carton, Hopothalmic-hypophysical interrelationships. Springfield, Thomas, 1956.

Fluhmann, C. F., Management of menstrual disorders. Philadelphia, Saunders, 1956.

Gross, Harry, and Jezer, A., Treatment of heart disease. Philadelphia, Saunders, 1956.

Gross, R. E., Surgery of infancy and childhood. Philadelphia, Saunders, 1953.

Hahn, Stuttering: significant theories and therapies. 2d. ed., Stanford, 1956.

Hingson, R. A., Anesthesia for obstetrics. Philadelphia, Lippincott, 1956.

Holman, Emile, New concepts in surgery of the vascular system. Springfield, Thomas, 1955.

Jackson, Ruth, Cervical syndrome. Springfield, Thomas, 1956.

Kaplan, O. J., ed., Mental disorders in later life. 2d. ed., California, Stanford, 1955.

Kuno, Yas, Human perspiration. Springfield, Thomas, 1956.

Laughlin, H. P., Neuroses in clinical practice. Philadelphia, Saunders, 1955.

Lewin, Philip, The back and its disc syndromes including injuries. Philadelphia, Lea and Febiger, 1955.

Lyon, Ernest, Virus diseases and the cardiovascular system. New York, Grune, 1956.

Mitchell, Cardiovascular innervation. Baltimore, Williams and Wilkins, 1956.

Page, I. H., Hypertension. 2d. ed., Springfield, Thomas, 1956.

Schiff, L., Diseases of the liver. Philadelphia, Lippincott, 1956.

Sheldon, Keith, Management of strokes. Philadelphia, Lippincott, 1956.

Smith, Homer, Principles of rural physiology. New York, Oxford University Press, 1956.

Talbot, J. H., Collagen diseases, including systemic lupus erythematosis. New York, Grune, 1956.

LOUISE D. C. KING
Librarian

Health Departments

BALTIMORE CITY HEALTH DEPARTMENT

Lead Poison Kills Three Children

In a recent *Saturday Letter to the Mayor*, the Commissioner of Health wrote:

"On June 1 and August 17 I wrote you of the lead poisoning cases occurring among the children of the city and the strenuous efforts the City Health Department was making to prevent them.

"This letter is to report further that on November 5 I personally inspected a Lead Killing House in the 1800 block of West Fairmount Avenue where two of this year's crop of 45 lead poisoning cases occurred; one of them died from that house on August 22 last. True, the poisonous lead paint was being removed by the owner at the time of my visit, under Health Department order. However, I was shocked at what I saw and assisted the workers in burning off coats of lead paint, as you may see in the enclosed photograph. The paint was apparently 12 to 15 layers deep. This lead paint was at knee level on a front room window sill where it seems that the children had opportunity to chew it at teething age. The dead child and the other poisoned child at this address also were both 22 months old.

"Three children have died among the 45 cases this year in Baltimore. I believe we have a very extensive de-lead-painting task ahead of us, scattered throughout the poorer sections of the city. There may well be 10,000 to 25,000 similar houses, corresponding to those that formerly had frostproof yard hopper toilets. It seems to me that landlords and homeowners alike have most serious responsibilities of which they appear not to be fully aware, in connection with this preventive effort.

Very truly yours,

Huntington Williams, M.D.

Commissioner of Health"

STATE DEPARTMENT OF HEALTH

Improvement in Tuberculosis—Not Final Achievement

This is the second part of a review of the tuberculosis situation in Maryland, presented by Dr. E. P. Sauer, Medical Director, Maryland State Tuberculosis Hospitals.

The tuberculin test continues to be an excellent means for the determination of infection. It is en-

A Child Died Here. The Commissioner of Health helps remove poisonous lead paint.

couraging to note that the percentage of positive reactors among young people is lower than it has been at any previous time. The U. S. Navy has found that 5% or less of new recruits reacted positively to the tuberculin test. In other similar age groups, comparable findings have been reported. Ten years ago, positive tuberculin reactions in this particular age group were considerably more frequent. This decrease in positive tuberculin reactors indicates that there is much less exposure to tuberculosis; however, a note of caution might be sounded here. There is some question as to whether these uninfected younger individuals coming into contact with open tuberculosis are more likely to come down with active disease than those who are already infected. This might be particularly important when these young persons travel or work abroad in countries where open tuberculosis is more prevalent than in this country. Personally, I feel that this decrease in positive tuberculin reactors is a good thing; however, if an uninfected person is going to be exposed unduly, consideration should be given to vaccination.

Vaccination against tuberculosis has been found a partially realized dream. BCG, although not perfect, has been of great value. It is usually given to those most likely to be exposed, such as children of parents with tuberculosis, hospital personnel, nurses and doctors. Protection is incomplete and probably averages about 70%.

Lately there has been talk of using INH as a preventive or as treatment in early infections. Recent experiments with monkeys indicate that tuberculosis germs can lie dormant during the time of INH therapy and then revive after INH has been stopped. The problem of INH prophylaxis is still in the experimental stages and much work needs to be done. Chemo-prophylaxis may give protection while being used but that does not necessarily confer immunity.

Another facet of INH therapy is interesting. Laboratory experiments have shown that INH resistant tubercle bacilli can rarely infect guinea pigs but can definitely infect mice and monkeys. From a Public Health point of view, it seems important to remember that a treated patient who has a positive sputum, while definitely less infectious than a non-treated case, is still a Public Health menace.

Cortisone can have an adverse effect on tuberculosis and may result in activation of the disease; therefore, in cases of active tuberculosis, Cortisone is used reluctantly and should be reserved for emergencies. If necessary, it can be employed when antituberculous drugs are simultaneously used. In patients with tuberculous meningitis or in other very ill patients the result may be gratifying when this combination therapy is used. However, unless there is a clear cut indication, Cortisone should definitely not be ordered.

Conclusion

Tuberculosis remains a major infectious disease in the United States. The prevalence of the disease is slowly decreasing but a large number of active cases, many of them unknown, are still in existence. Antituberculous therapy can often give good results when combined with proper rest, food and surgery. To be effective, therapy must be used in adequate amounts and should be continued for a sufficient period of time. To date, relapses are surprisingly low in patients who have been on adequate, and I do stress *adequate*, chemotherapy. We do not know what the future of these cases will be but we hope for the best. There is a very definite and continuing gain in the treatment of tuberculosis, but the desirable goal of eradication is still far from attainment.

STATE OF MARYLAND DEPARTMENT OF HEALTH

MONTHLY COMMUNICABLE DISEASE REPORT

Case Reports Received during 4-week Period, December 1–27, 1956

A HEALTHY AND HAPPY NEW YEAR TO ALL	CHICKENPOX	DIPHTHERIA	GERMAN MEASLES	HEPATITIS, INFECT.	MEASLES	MENINGITIS, MENINGOCOCCUS	MUMPS	POLIOMYELITIS, PARALYTIC	POLIOMYELITIS, NON-PARALYTIC	ROCKY MT. SPOTTED FEVER	STREP. SORE THROAT INCL. SCARLET FEVER	TYPHOID FEVER	UNDULANT FEVER	WHOOPING COUGH	TUBERCULOSIS, RESPIRATORY	SYPHILIS, PRIMARY AND SECONDARY	GONORRHEA	OTHER DISEASES	DEATHS: Influenza and pneumonia
Total, 4 weeks																			
Local areas																			
Baltimore County	18	—	1	1	1	—	11	—	—	—	5	1	—	1	14	—	2	m-1	6
Anne Arundel	13	—	—	—	—	—	—	1	—	—	—	—	—	2	—	—	1	—	1
Howard	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Harford	1	—	—	—	—	—	1	—	—	—	2	—	—	4	1	—	—	—	—
Carroll	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
																		*	
Frederick	9	—	3	—	—	—	3	—	—	—	1	1	—	2	2	—	4	m-1	1
Washington	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	2	—	1
Allegany	4	—	—	3	1	—	2	—	—	1	5	1	—	1	7	—	—	m-1	2
Garrett	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Montgomery	15	—	4	1	2	—	38	—	—	—	5	—	—	2	6	—	—	—	1
Prince George's	12	—	—	—	—	—	13	1	1	—	8	—	—	—	7	—	2	—	5
Calvert	1	—	—	—	—	—	1	—	—	—	2	—	—	—	1	3	2	—	—
Charles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
Saint Mary's	2	—	—	—	2	—	4	1	—	—	—	—	—	—	1	—	—	—	—
Cecil	—	—	—	—	—	—	1	—	—	—	—	—	—	—	3	1	1	—	1
Kent	—	—	—	—	1	—	8	—	—	—	—	—	—	—	—	—	—	—	—
Queen Anne's	—	—	—	1	—	—	—	—	—	—	—	—	—	14	1	—	—	—	—
Caroline	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Talbot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	—	2
Dorchester	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—
Wicomico	7	—	—	1	5	—	3	—	—	—	1	—	—	—	5	1	2	—	—
Worcester	—	—	—	—	—	—	1	—	—	—	—	—	—	—	3	—	—	—	—
Somerset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Total Counties	84	0	8	7	12	0	86	3	2	1	30	3	0	26	57	5	20		24
Baltimore City	57	0	5	3	9	0	63	1	0	0	16	2	0	18	80	11	383		21
State																			
December 1–27, 1956	141	0	13	10	21	0	149	4	2	1	46	5	0	44	137	16	403		45
Same period 1955	198	1	22	16	570	4	167	5	6	1	66	1	0	33	127	13	469		57
5-year median	266	4	22	46	160	3	115	7		0	91	1	1	53	166	19	533		57
Cumulative totals																			
State																			
Year 1956 to date	2764	2	1132	98	9297	46	2954	86	19	16	759	20	7	180	1945	267	6918		662
Same period 1955	2381	13	503	350	2384	33	1816	170	110	23	2319	20	0	403	1980	204	7218		633
5-year median	3510	22	711	399	5845	58	2198	287		33	1553	28	23	535	2409	225	7321		620

m = meningitis, other than meningococcus.

* = para-typhoid fever, 1 case.

Book Reviews*

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them.

Of Water, Salt and Life. An Atlas of Fluid and Electrolyte Balance in Health and Disease. Lakeside Laboratories Incorporated, Publishers, Milwaukee. Copyright 1956. 34 pages, 31 plates in color.

This is a magnificently portrayed and beautifully colored representation of normal and abnormal fluid and electrolyte balances, mainly by means of graphic devices. Most of the plates utilize a quite new diagrammatic representation of the body fluid compartments, and once the reader is familiar with these devices, he can detect quickly the primary abnormality, the primary organ involved and in many instances, the primary clinical manifestation.

The descriptive summary on the page facing the graphic plate is short, concise and not burdened with theory or description.

All in all this is a most concise, beautifully conceived and magnificently achieved compendium of fluid and electrolyte balance. It is immediately apparent upon opening the book that most of the diagrams utilized will appear shortly upon the projection screens of a good many class rooms and lecture halls where physicians and physiologists are propounding the intricacies of this particular problem in health and disease. In this sense alone, this small book is a singular gift. On the other hand, it will require either a goodly knowledge of the subject beforehand or an adequate and careful explanation of its complexities before the book can accomplish fully its purpose. It seems too bad that the time and effort that was spent in the preparation of the charts and graphs could not have been matched by a similar effort in written text.

At first glance the book appears to rank with many of the beautifully done books for children that are obtainable today. A short excursion into the book will very promptly assure one that he must have some considerable background knowledge before the full implication of the emaciated text and the fulsome graphs is truly appreciated.

R. W. B.

* The reviews here published have been prepared by competent authorities and do not represent the opinions of any official bodies unless specifically stated.

Diagnosis and Treatment of Vascular Disorders. Edited by Saul S. Samuels, M.D., with seventeen contributors. Copyright 1956. The Williams and Wilkins Company, Baltimore, Publishers. 621 pages. Illustrated. $16.00.

A careful and detailed review of this book evokes the following observations and comments:

Firstly, the book is sizable (621 pages), consists of 24 chapters, has a good index and can boast of very fine and complete references at the end of each chapter. The work is nicely readable and it is detailed in regard to the subject matter: that is, the Specialty of Angiology. Although there are a few contradictions and differences of opinion which are inevitable with seventeen contributing authors, the overall presentation of subject matter is well done and should prove useful to the students in trying to learn the ever enlarging field of vascular disease as well as to the internist or surgeon who is interested in the field as a specialty. The subject matter may be roughly divided as follows:

The first three chapters may be considered under the heading of Anatomy and Pathologic Physiology of the peripheral circulation; the next two chapters deal with complete examination of the patient from a vascular standpoint, including the very detailed means of X-ray diagnosis or angiography; the bulk of the book or the next eighteen chapters is devoted to the clinical aspects of vascular disease and it is noteworthy that the common disorders are treated with proportionate importance and detail, and the less common disorders, such as, endarteritis obliterans, erythermalgia and periarteritis nodosa are just adequately treated.

Perhaps an additional chapter on Collagen diseases, particularly as they affect the peripheral blood vessels, might have made the book more complete. Strictly speaking, the subject of Portal Hypertension might have been included with a discussion of the various shunt procedures. The chapters dealing with arteriosclerosis, thromboangitis obliterans, Raynaud's Disease and phenomena, and the varicose vein chapters are indeed excellently and completely done. There is some unavoidable repetition in the chapter on the Scalenus Anticus syndrome and the chapter on chronic edema of the leg,

which had already been covered to some extent in previous chapters under the discussion of Raynaud's Disease and varicose veins.

In all chapters there are numerous illustrations and photos, charts and graphs that help the reader in no small way.

This book will leave the student as well as the specialist with many, as yet, unanswered questions concerning the complex subject of peripheral vascular disease, and with many unexplained and at times contradictory facets. The realization becomes more acute in this field, that what is needed most of all is much more research in the human sympathetic nervous system and on the diseases that affect the blood vessels in human extremities.

R. M. C.

ANNUAL MEETING
1 9 5 7
MEDICAL AND CHIRURGICAL FACULTY
WEDNESDAY, THURSDAY, and FRIDAY MAY 1, 2, and 3, 1957

Ancillary News

NURSING SECTION

M. RUTH MOUBRAY R. N., *Executive Secretary,*
Maryland State Nurses Association,
Journal Representative

ANNUAL CONVENTION MARYLAND STATE NURSES ASSOCIATION AND MARYLAND LEAGUE FOR NURSING

The Annual Convention of the Maryland State Nurses Association and Maryland League for Nursing was held at the Emerson Hotel, November 7-9, 1956. The theme of the convention was "Nursing Today."

The following platform was adopted by the Maryland State Nurses Association:

The Association participates in the provision of health protection for the people of Maryland by:

1. Working actively with allied groups and the public to create understanding and to meet the health needs of the state, particularly the needs for nursing care.

2. Co-operating with appropriate public and private agencies which take leadership in planning for and providing health service in times of emergency.

3. Promoting the inclusion of nursing benefits in prepaid hospital and medical care plans by co-operating with the Maryland League for Nursing in programs designed to insure adequate nursing service.

4. Continuing studies designed to improve nursing practice and to advance effective utilization of professional nursing skills.

5. Providing for assisting in the continued study, definition, and implementation of functions, standards, and qualifications of practice as developed by practitioners in each area of nursing.

6. Promoting changes in the nursing practice law for the licensure of qualified practitioners of nursing which will protect the public and which will facilitate interstate licensure.

7. Increasing the supply and effectiveness of competent nursing personnel by improving employment conditions, promoting legislation to expand educational opportunities, extending the use of professional counseling and placement services and of nurses professional registries.

The Association aids nurses to become more effective members of their profession by:

8. Assisting nurses to develop their capacity to help meet the emotional, spiritual, social and physical needs of patients and the health needs of the community.

9. Assisting in promoting legislation which will provide public funds for research, scholarships, and the continued improvement of education in nursing.

10. Improving the working conditions of nurses through recommending minimum standards of employment for registered nurses and through assisting in promoting desirable social and labor legislation.

11. Assisting in promoting further improvements and extension of the Federal Social Security Act which will benefit nurses; encouraging the development of private insurance plans by employers to supplement Federal Social Security, and urging nurses to plan for and participate in individual and group insurance plans.

12. Continuing to develop professional, vocational, and educational counseling for nurses.

13. Promoting full participation of members of minority groups in association activities and working to eliminate discrimination in all aspects of nurse employment and professional educational opportunities.

14. Continuing to improve the structure of state organizations to facilitate effective action in nursing and to encourage active participation of all nurses

in the Maryland State Nurses Association and the Maryland League for Nursing.

The Association promotes better health care for the people of the world by:

15. Actively supporting the International Council of Nurses through the American Nurses' Association.

16. Assisting in sponsoring international exchange of nurses.

17. Co-operating with public and private agencies in Maryland responsible for international programs for professional personnel which promote international good will and mutual aid among nurses.

18. Continuing to support the United Nations and its specialized agencies, particularly the World Health Organization.

In addition to the usual business meetings of the Maryland State Nurses Association and the Maryland League for Nursing, their sections and departments, various program meetings drew a large attendance of nurses from throughout the state.

Speakers and their topics were as follows: Dr. Richard D. Weigle, President of St. John's College, "Communication"; Dr. Michael M. Dacso, Assoc. Prof. Clinical Physical Medicine and Rehabilitation, New York University College of Medicine, "Rehabilitation—General Concept and Philosophy"; Miss Alice B. Morrissey, Instructor and Supervisor, Rehabilitation Nursing, New York University—Bellevue Medical Center, "Rehabilitation—The Nurse's Place on the Team"; Miss Ruth B. Freeman, President, National League for Nursing and Associate Professor, Public Health Administration, School of Hygiene and Public Health, The Johns Hopkins University, "Public Health Aspects of Industrial Nursing"; Dr. Clifton T. Perkins, Commissioner of Mental Hygiene, State of Mary'and, "Tranquilizers Have Changed Administration and Treatment"; Mrs. Lillian Sholtis Brunner, Consultant, Medical and Surgical Nursing, Bryn Mawr Hospital School of Nursing, "What Student Experience in the Operating Room Should Be"; Dr. Wilson H. Elkins, President, University of Maryland, "Aspects of General Education of Interest to Nurses"; Mrs. Margaret F. Sheehan, Assistant Professor and Director of Nursing Service, University of Chicago Clinics, "The Practice of Nursing Service Administration."

A highlight of the convention was a demonstration on effective use of training aids for instruction in emergency medical care. This very realistic demonstration was presented by Mr. Morris M. Goldberg, Chief and Mr. Klyde E. Kraft, Assistant Chief, Training Aids Division, Medical Illustration Service, Armed Forces Institute of Pathology, Walter Reed Medical Center, and Major Ruth A. Fisher, 68th Medical Group, Headquarters, Fort George G. Meade.

The Student Nurses Council of Maryland heard Mr. John J. Ghingher, Jr., member of Board of Trustees, Franklin Square Hospital, speak on "Medico-Legal Aspects of Nursing Today."

FREE PARKING

There is a parking lot for the convenience of members maintained by the Medical and Chirurgical Faculty at the back of the building. Entrance is through the Maryland Avenue gate, between Preston and Biddle Streets, Baltimore.

Woman's Auxiliary Medical and Chirurgical Faculty

MRS. GERALD W. LEVAN, *Auxiliary Editor*

AMERICAN MEDICAL EDUCATION FUND

MRS. CONRAD ACTON*

The National Fund for Medical Education was founded in 1949, under the leadership of President Eisenhower, then head of Columbia University, and other university presidents. This fund is supported by three national groups: The American Medical Association; the Association of American Medical Colleges; and the National Association of Manufacturers. It was designed to offset the cost of medical education, which has risen 84% since World War II.

Why all the furor about medical education? The reason for this is to gain private support for the nation's 81 Medical Schools facing a financial crisis that threatens the quality of medical teaching and endangers the national welfare. The medical student's education costs $3,648 per year, and the student pays an average of $682 per year. This means that nearly four-fifths of the cost of a medical education must be met by public or private funds.

You may ask why the National Association of Manufacturers is interested. This is a powerful and enlightened group who realize, more clearly than most, the importance of health to workers, to executives, and to the communities in which they live. Also, they state that it is more economical to support medical education voluntarily through the medical Fund than involuntarily through taxes. We are indeed fortunate that so influential a group is interested in medical education.

Our 81 medical schools are the sole source of supply of the increasing number of physicians needed to meet the requirements of the growing population. Medical education is national in character, and best financed through a central fund. The American Medical Education Fund is the practical vehicle for securing support for all 81 medical schools.

It is estimated that $10,000,000 is needed annually to meet the deficit. Of this, $2,000,000 contributed by doctors themselves will be met by $8,000,000 contributed by industry. The Ford Foundation has recently contributed ten million dollars to the National Fund in the form of "matching funds," and is available at the rate of two million a year as a bonus for gifts to the fund.

If the doctors give $2,000,000 yearly, this amounts to only $10 per doctor per year. What did Maryland doctors give last year? Statistics show that 260 of Maryland's practicing physicians contributed $4,692, an average of $1.90 for the 2500 doctors in the state, which is less than the price of a carton of cigarettes. By this we are placing our own value on medical education. We cannot expect others to contribute until *we* give to a cause that should be close to our hearts.

Why Not Let The Federal Government Subsidize Medical Education?

To rely on Federal subsidies would be to invite government domination. It might come gradually, but nevertheless surely. The supervision of public monies required by law would necessarily limit teaching and research programs. Academic freedom is absolutely essential to the full and free development of the medical sciences. Any curtailment of that freedom would hamper, rather than encourage, the spirit of inquiry out of which scientific progress grows.

If it becomes necessary for the medical schools to accept subsidies in the future, it is important that they be balanced by substantial private funds. It is even more important that a broad representative agency like the Fund, representing medicine, industry, and the public, be the link between medical education and private support.

Now that we have considered the purpose and scope of the National Fund for Medical Education, of which the American Medical Education Fund is but a part, let us review the methods by which a deficit can be met:

1. Increase tuition from the present average of $692 to $3,500.

2. Let the Federal Government subsidize and dominate

or

3. Have these funds balanced by substantial private funds.

The choice is up to us!

* State Chairman.

COMING MEETINGS

Organization	*Time*	*Date*	*Place*
Baltimore City Medical Society	8:30 P.M.	Friday, February 1, 1957	1211 Cathedral Street
Woman's Auxiliary to the Baltimore City Medical Society	11:00 A.M.	Wednesday, February 13, 1957	University Hospital
Committee for the Study of Pelvic Cancer of Medical and Chirurgical Faculty	5:00 P.M.	Thursday, February 14, 1957	Woman's Clinic, The John Hopkins Hospital
Obstetrical and Gynecological Society of Maryland	6:30 P.M.	Thursday, February 14, 1957	Dinner meeting, Stafford Hotel
Neuropsychiatric Section, B.C.M.S.	8:30 P.M.	Thursday, February 14, 1957	1211 Cathedral Street
Pathology Section, B.C.M.S.	7:30 P.M.	Monday, February 18, 1957	University Hospital
Radiological Section, B.C.M.S.	5:30 P.M.	Tuesday, February 19, 1957	Hopkins Club
Cancer Section, B.C.M.S.	Unknown	Wednesday, February 20, 1957	To be announced
General Practice Section, B.C.M.S.	9:30 P.M.	Thursday, February 21, 1957	1211 Cathedral Street
Joint Committee on Maternal Mortality—City Health Dept. and B.C.M.S.	4:00 P.M.	Thursday, February 28, 1957	1211 Cathedral Street
Joint Meeting Orthopedic Section of B.C.M.S. and Philadelphia Orthopedic Society	Unknown	To be announced	Philadelphia, Pennsylvania

All meetings are held in the Medical and Chirurgical Faculty Building, 1211 Cathedral Street, Baltimore, Maryland, unless otherwise designated.

DEFENSE OUTLINES RULES IN OSTEOPATH COMMISSIONING

AMA Washington Letter, 84–99

The Defense Department has issued a directive outlining policy in the commissioning of osteopaths in the military services, a law passed by the 84th Congress. An osteopath must meet the following requirements, among others:

1st. Be a graduate of a college of osteopathy whose graduates are eligible for licensure to practice medicine or surgery in a majority of the states, and be licensed to practice medicine, surgery or osteopathy in one of the states, territories or the District of Columbia. *2nd.* Possess such qualifications as the Secretary concerned may prescribe for his service after considering the recommendations for such appointment by the surgeon general of the Army, Air Force or Navy. *3rd.* Have completed a minimum of three years college work prior to the entrance into a college of osteopathy, plus a four-year course with degree of doctor of osteopathy in a school approved by the American Osteopathic Association, and a year internship or residency training approved by the AOA.